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# NAVAL POSTGRADUATE SCHOOL

## Monterey, California



Organizational Handling of  
Midcareer Moves: The Reactions of  
Navy Line Officers

by

James K. Arima

September 1981

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NAVAL POSTGRADUATE SCHOOL

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The reaction of Navy line officers to the detailing process by which they receive new assignments was examined from the standpoint of the emphasis they thought should be placed on the needs of the service, career needs, and their personal desires, their billet preferences for the new assignment, their career intentions, and the information sources used to ascertain available assignments. These are contrasted with their evaluation of the actual emphasis they found to be placed on Navy, career, and personal needs, their degree of involvement in the decision process, and the acceptability of the new assignment. Multi-		

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variate analyses determined the contribution of these factors to overall satisfaction with the detailing process and their impact on career intentions. The majority of officers were satisfied with detailing and their new assignment and intended to continue on active duty. But the minority that was less than satisfied and those on whom the detailing process made a negative career impact were in sufficient numbers to warrant further efforts to study and improve the handling of midcareer officer moves.

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## FOREWORD

This is the second in a series of reports emanating from the 1980 questionnaire survey of unrestricted line officers of the Navy who received permanent change-of-station orders in the spring-summer of 1980. The survey inquired about their expectations, experiences in negotiating the new assignment, and their overall assessment of the detailing process and its outcome. The purposes of the survey were to obtain feedback on the detailing system as it is experienced by the consumer and to ascertain the impact of moves at various stages in the careers of line officers.

The first report was NPS-54-81-004, "The 1980 Survey of Certain Unrestricted Line Officers of the Navy Regarding Their Reassignment to a New Position," April 1981. It provided the background leading to the survey, described the conduct of the survey, provided a codebook for the SPSS data file that was created, reproduced copies of the survey instruments, and presented verbatim the answers to an open-ended question on satisfaction with the detailing experienced.

Carmen Cox continued to provide invaluable support in her position as the project research assistant. Her assistance was especially valued in formulating and conducting the data analyses, maintaining the system file, and conceptualizing and interpreting the study findings.

Karen Brown was most helpful in typing the manuscript and performing the many chores incidental to its production. --J.K.A.





## SUMMARY

The movement of managers and executives has become a necessity with the increasing size, complexity, and competitiveness of commercial and industrial enterprises. From the standpoint of the individual, the willingness to move became indispensable for professional development and advancement. Inevitably, the integration of organizational and individual interests over the long run became an object of study and improvement in its own right under the concept of careers in organizations. The movement of employees began to assume new dimensions and importance with the increasing costs of relocating individuals and their families and with the growth of new societal values and norms which questioned the need to blindly acquiesce to organizational demands and which developed career alternatives that did not involve the dedicated pursuit of linear progression up the organizational hierarchy. As a result, managing careers in organizations is now a high-priority item within organizations and in research activities on management and administration.

The movement of officers in military organizations has become a characteristic of military life with the need for rotational moves involving overseas duty and sea tours entailing various degrees of hardship. The military enterprise was also a leader in establishing a series of moves through specific experiences and training for the professional development of its officers. But especially with the advent of the all-volunteer force and increasing demands to be cost conscious, the armed forces of the United States are faced with the same personnel and manpower problems of industry. In essence, the individual officer has a set of personal values, family considerations and pressure, and career alternatives that are outside of the military; these enable him or her to accept or not accept an offered change of assignment. Thus, the movement of career officers becomes directly linked with their retention. The loss of an officer from midcareer is more costly to the military than in civilian industry because it "grows its own" and cannot procure a replacement "off the street."

This study was initiated by the Navy to examine the reactions of officers to the "detailing" system which is involved in negotiating a new assignment for an officer who is due to be rotated or moved. In its barest detail, the system includes a detailer at Navy headquarters who has billets (positions) to be filled on one hand and officers to be moved on the other. He or she must interact with the officer in the field to maximize, simultaneously, the fulfillment of the needs of the Navy and the career needs and personal desires of the individual officer. This triumvirate of needs is called the detailing triad, and each need is identified as a "leg" of the triad.

8 X

This research was initiated in the spring-summer of 1980 by a questionnaire that was inclosed with permanent change-of-station orders of Navy line officers who were being moved. The method ensured a random sample, since no biases are associated with the rotational date of an officer. The respondent sample was over a thousand, from which 926 acceptable cases were processed. Among the questions were those pertaining to the acceptability of the new assignment from a career standpoint, the timeliness of the new assignment from an overall career perspective, the billet preferences of the officer at the time negotiations took place, the information sources used, the career intentions of the officer before and after the receipt of the new assignment, his or her beliefs about the relative emphasis that should be placed on each leg of the detailing triad, his or her evaluation of the emphasis that was actually placed on each leg during negotiations, and his or her overall satisfaction with the detailing system. The respondent was provided the opportunity to explain the latter in an open-ended question.

Most of the respondents were very satisfied or satisfied with detailing as they experienced it, placed their new billets at or near the top of the ladder rankings, and expected to continue on active duty. Still, there was a sizeable group of approximately one-third of the respondents that was neutral to negative in these same dimensions and changed their active duty intent. Thus, there seems to be considerable room for improvement of the detailing process from the standpoint of the person who is being reassigned.

In expressing their beliefs about the priority of emphasis that should be given to the triad of detailing, most of the respondents described patterns or profiles that placed the needs of the Navy in first place. There was a distinct, although considerably smaller, group that maintained that personal desires and career considerations should be given first priority. There was very little correspondence between an individual's profile of beliefs about detailing and a profile that was constructed as a result of the person's evaluation of the emphasis given to the triad members during actual negotiations in the detailing process. This was especially true for the group that had placed personal desires and career needs in first priority. There was greater correspondence between just the first priority of belief and the highest emphasis experienced in actual detailing. There was a very small relationship between what respondents said ought to be emphasized and satisfaction with detailing. Though most had given the needs of the Navy first position in what should be emphasized, emphasis on the needs of the Navy in the actual detailing process always had a negative influence on satisfaction with detailing or retention intent. Those who said that personal and career needs should be given priority tended to find greater satisfaction with detailing and their new assignments. It appears that those who espoused the traditional, company policy in their beliefs did not like it when



it was fed back to them. On the other hand, those who went into negotiations in the detailing process with an expectation that personal desires and career needs were the primary basis for negotiations and decisions were most likely to emerge from the encounter satisfied.

Factors involved in the detailing process that most influenced the overall satisfaction with detailing were an emphasis on personal needs and the new assignment, itself. Acceptability of the new billet was determined most by the individual's perceived involvement in the detailing process and the emphasis given to career needs. Timeliness of the new billet from an overall career perspective and the desire for a Washington-based shore billet were also positive contributors to satisfaction with the new billet. But those whose preference was for a subspecialty-coded, shore billet were less satisfied with their new assignment than officers who preferred a general, warfare specialist (1050) billet.

Satisfaction with detailing, whether defined by a simple overall measure of satisfaction or an equation predicting satisfaction with detailing, explained about 11 percent of the variance in career intent (retention) as a result of the detailing process. It is difficult to predict career intent change when it does not change for most officers in midcareer. But if there is concern about retaining officers, the knowledge that the detailing process does have an effect on retention intent is important because it provides the opportunity to do something about improving retention. The aspects of the detailing process that affected retention intent were attention given to personal desires in the detailing process and the new billet, itself. Emphasis on the needs of the Navy had a negative effect. The billet preference expressed by the respondents revealed that as many most-preferred or least-preferred the same category of billet in many cases. If this is so, there seems to be a good opportunity to find billets that are both personally desired and meet the career needs of the individual being reassigned. The needs of the Navy will take care of itself in this situation and does not require emphasis in negotiations.

Only half of the variance in overall satisfaction with detailing could be predicted from the emphasis given the detailing triad, involvement in the detailing process, and the new assignment. Obviously, there are many other factors involved in detailing that were not addressed in this study. Some of these come under the broad classification of administrative procedures, such as the timeliness of informal and formal notifications of the assignment decision, timeliness in the receipt of orders, availability of communication channels to the detailing system, and the availability of the detailee, herself or himself. There seems to be a common perception that information about the actual billets available are withheld from the individual being reassigned, which gives the detailee an unfair advantage. There are also the inter-

personal skills of the detailer and aspects of the new billet that impact on family quality of life. These and other similar factors were brought out in the open-ended responses which were reproduced in an earlier report and classified in the content analysis of a thesis by a NPS graduate. Research at the Navy Personnel R&D Center in San Diego has also found such variables to be significantly related to the evaluation of the detailing process in a junior, line-officer sample. Future studies of the detailing process should include an evaluation of these important, "bread and butter" issues.

These findings suggest that a greater sensitivity to personal and career needs and improved transactional skills on the part of the detailer that would result in a greater feeling of involvement on the part of the person being reassigned could improve the acceptance of management's role in the detailing process. From the standpoint of the individual being reassigned, it is apparent that too many persons may have an overly naive and fragile concept of what a career involves. Unquestioned acceptance of organizational doctrine as the sole guideline for career decisions does not permit the satisfactory resolution for an individual of career and personal needs with the requirements of the organization for the adequate manning of positions. Greater emphasis should be given in service schools or special workshops to help officers develop more mature and realistic career objectives and strategies by utilizing the large amount of information there is now on careers. A workshop on officer career management given as an elective at NPS and developed as a direct by-product of this research project received such accolades as "the best course I've taken" and "every student should have this course." The point to be made is that even selected officers, such as NPS students, find it a genuine eye-opening experience when they realistically attempt to appraise and establish their career objectives and options and the long-run strategies and tactics for meeting them. Actions, such as those recommended, should result in a greater commitment by officers and their families to a military career, make detailing a more difficult but rewarding experience to both the detailer and the consumer, and ensure the most effective utilization of available talent--especially in the case of the very well-qualified individuals.

This study developed and used a model of the process that leads from the performance history of the individual, to the formation of beliefs about detailing, to the evaluation of detailing experienced, to the formation of a career intention, and the role of the new assignment in the process. It was developed from the literature on job satisfaction and the prediction of behaviors from attitudes. It proved to be useful and efficient in eliciting an understanding of the relationship among the important variables involved in the detailing process and should be of interest to researchers involved in this area and the manager who desires more detail as to how the foregoing conclusions were reached.

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## INTRODUCTION

The movement of individuals within organizations has become a characteristic of managerial and executive careers (Robertson, 1978). From the organizational standpoint, such moves are initiated by the need to fill positions that are vacated for various reasons such as retirements, resignations, and deaths or are created by reorganizations, new ventures, and advances in technology. From the standpoint of the individual, job changes provide opportunities for professional development, promotions, and advancement in the organizational hierarchy. Taken together, the interaction of the organizational and individual perspectives over time creates careers. A great deal of interest has been generated in organizational careers in recent years as it has become increasingly evident that the planning and management of careers are crucial to the well being of the organization and the individual (Derr, 1980a; Hall, D. T., 1976; Jelinek, 1979; Morgan, 1980; Schein, 1978; Van Maanen, 1977). Individual careers can also be examined from the standpoint of their development within occupations rather than organizations (Barley & Van Maanen, 1981). This approach highlights the fact that individuals have the freedom to develop their careers across organizational boundaries. Doing so has the potential for creating problems or even hardships for losing organizations that have difficulty in obtaining replacements.

The movement or reassignment of individuals has become a characteristic of military life. In the United States, this has not always been the case, since homesteading at an outpost fort or port facility for the greater part of one's career was routine (Hayes, 1978). < But today, each of the military services has practices in common of using the movement of its officers through a planned sequence of schools and assignments to develop the requisite military capabilities and skills. > In addition, there are national commitments that require the stationing of service personnel abroad or, in the case of the Navy, there is sea duty that may require lengthy deployments away from the homeport. These assignments necessitate a large class of movements called rotations between overseas (OS) stations or sea duty and duty in the continental United States (CONUS) or on shore. Collectively, these and movements of persons entering or leaving the service are called permanent change of station (PCS) moves. The PCS program is complex and costly. In FY 1977, for example, there were 1.6 million moves in the Defense Department (DOD) at a cost of about \$1.6 billion (Comptroller General, 1978).

While frequent moves were accepted as an inevitable part of managerial careers in the rapid growth of industries after World War II and continuing into the '60s, there has been a decline in the frequency of moves since the decade of the '70s (Korn, 1974).

Moreover, the intense self-examination of the American way of life that took place in the '60s has created new values among managerial personnel that have done away with the uncritical acceptance of the need for frequent moves. Rather, individuals may now resist moves that are seen as inimical to the best interests of their families or that are not consistent with the role that they perceive for work in their own personal lives (Banks, 1979; Korn, 1974; McClenahan, 1979; Managers move more, 1976; Van Maanen, Schein, & Baily, 1977). In addition, the majority of wives are now in the workforce, and this creates a problem when one member of a dual-career family must move (Hall, D. T., 1981; Hall, D. T. & Hall, F. S., 1979; Hall, F. S. & Hall, D. T., 1978; Maynard & Zawacki, 1979).

These new career perspectives and problems are represented in the military setting just as they are in civilian organizations and occupations. While the military officer may have a more general acceptance of the need for a planned sequence of moves, the new generation of officers examines proposed, specific moves against a background of possible, alternative moves that may be more suitable to the needs of an individual and his or her family. In the modern, peacetime, voluntary forces the individual has considerable leverage in the situation because he or she can threaten to resign if an unacceptable move is insisted upon. Numerous examples using this leverage can be found in Arima (1981a). Thus, the concerns with moves and reassignments, from the standpoint of the individual in the armed services, is not very different from the civilian scene.

### Special Attributes of Personnel Movement

#### in the Armed Services

There are some differences of considerable magnitude at the organizational level, however, between the civilian and military communities in the movement of individuals.

First, civilian organizations tend not to move their people without a specific requirement, and their overseas positions are now generally filled with local hires. Civilian organizations can be more flexible in their support of individual moves. They have provided aid in the sale and purchase of homes, sponsored paid trips to the new area in advance of the actual move for house-hunting and other purposes, and they have reimbursed fully the costs of the move, including losses suffered in the sale and purchase of homes (Comptroller General, 1978; DiDomenico, 1978; Henderson, 1979). These are the areas where the military services have been unable to keep up with the civilian trend owing to the unwillingness of Congress to provide the necessary funding. For example, until very recently, the reimbursement to an individual for using the family car for a PCS move was only 10¢ a mile. As a result, individuals being moved may experience considerable personal stress and financial loss, especially when orders to move are received with little time to execute the move.



In addition, the military has a closed personnel system where entry into the system is at the bottom of the hierarchy and lateral entry is essentially nonexistent. Thus, long lead times are necessary to develop the adequate manning of positions that require military experience and skills, whereas the civilian organization can recruit new personnel at all levels of the hierarchy. In this situation, perturbations in requirements for personnel or in the supply of personnel must be met, in the short run, by lengthening and shortening tours of duty and temporarily eliminating--"gapping"--others to meet the most essential manning requirements. This situation causes turbulence and unpredictability in the movement of individuals and the undesirable lengthening or frequency of hardship assignments.

Finally, the military forces, unlike civilian organizations, have a law which states what the shape of the hierarchical pyramid must be (United States Congress, 1980). That is, relatively strict proportionality in numbers must be maintained for the different levels (ranks) of officers. The law also has provisions for implementing this structure by eliminating individuals on an "up or out" basis. As a result, the alternatives to "up" that exist in civilian careers are essentially absent in military careers. For example, the Navy, which was complaining about its shortage of chaplains, was severely chastized by the Senate's Manpower and Personnel Subcommittee when it learned that the Navy was, at the same time, eliminating chaplains from the service because they did not meet Navy standards for promotion (United States Congress, Senate, 1978).

- Since most positions or billets require a specific rank and specialty, and since each member of the officer force is similarly identified by rank and specialty, many movements of its officer personnel are generated by the system, itself. For example, a person may be promoted out of a billet or another, who is not promoted, may be dismissed from the service. The system also creates severe constraints on the free movement of individuals--e.g., an officer cannot be assigned to a position where he or she would outrank the superior, an otherwise qualified individual cannot be assigned to a position because he or she is too junior in rank, and positions that do not require a warfare specialty must often be formally allocated among the various warfare specialties if they are highly desirable or undesirable, and so forth. <Thus, the enforced structure of the officer force and the mandated up-or-out provisions of law necessitate moves, create restrictions on moves, and place an individual's career in jeopardy each time he or she is reassigned.

Compared to the corporate sector, the movement of personnel occupies a more central role in the management of human resources in the armed services because of their (1) mandatory nature, (2) their greater frequency, (3) the potential financial costs to the individual being moved, (4) their place in a sequence of planned

personal development, (5) the provisions of law that require promotion or elimination, and (6) the greater costs to the service of personnel losses brought on by undesirable reassignments.

## Organization for Personnel Movement in the Navy

The special characteristics of service moves, their ramifications for the individual, and other factors that could be included in the list make the reassignment of officers a major, continuing activity in the armed services. While the services approach the task in similar ways, the Navy system will be the focus of interest in this study. Plans and policies regarding the acquisition, training, and movement of personnel are made within the office of the Deputy Chief of Naval Operations for Manpower, Personnel, and Training--the DCNO(MPT) or OP-01. The implementation of plans and policies involving the movement of officers is carried out by the Distribution Department within the Naval Military Personnel Command (NMPC). The actual matching of the individual officer to be moved and a billet to be filled is consummated by an officer occupying a position called a detailer. The process is referred to as detailing. Most detailer positions are organized by the ranks of individuals to be detailed within a particular officer community that are called designators. For example, there are detailers for commanders who are designated as surface warfare officers.

The detailer is provided information about the billets in his or her area of responsibility that will need a replacement within the forthcoming 6 mos. The detailer also has a current package--called a "pocket"--that summarizes the background, history, and performance of officers to be reassigned. The information available also includes a preference card that officers submit regarding their desires for the next assignment. The detailer is given guidelines and priorities for filling billets in various categories according to the current needs of the Navy. The objectives of detailing are, in most general terms, simultaneously to satisfy the needs of the Navy and to meet the career needs and personal desires of the individual officers being moved. This is referred to as a triad of detailing and is probably not very different from the practices in any organization.

In actual practice, the detailer must satisfy a placement officer, who is primarily concerned with filling billets under his or her conizance with qualified personnel--i.e., the needs of the Navy. The detailer must attempt to satisfy the officer being moved with all of his or her personal concerns. Complementing the placement officer, the detailer must be interested in finding the best billet for the individual officer to meet his or her career needs. The system is shown in Figure 1. The problems that these



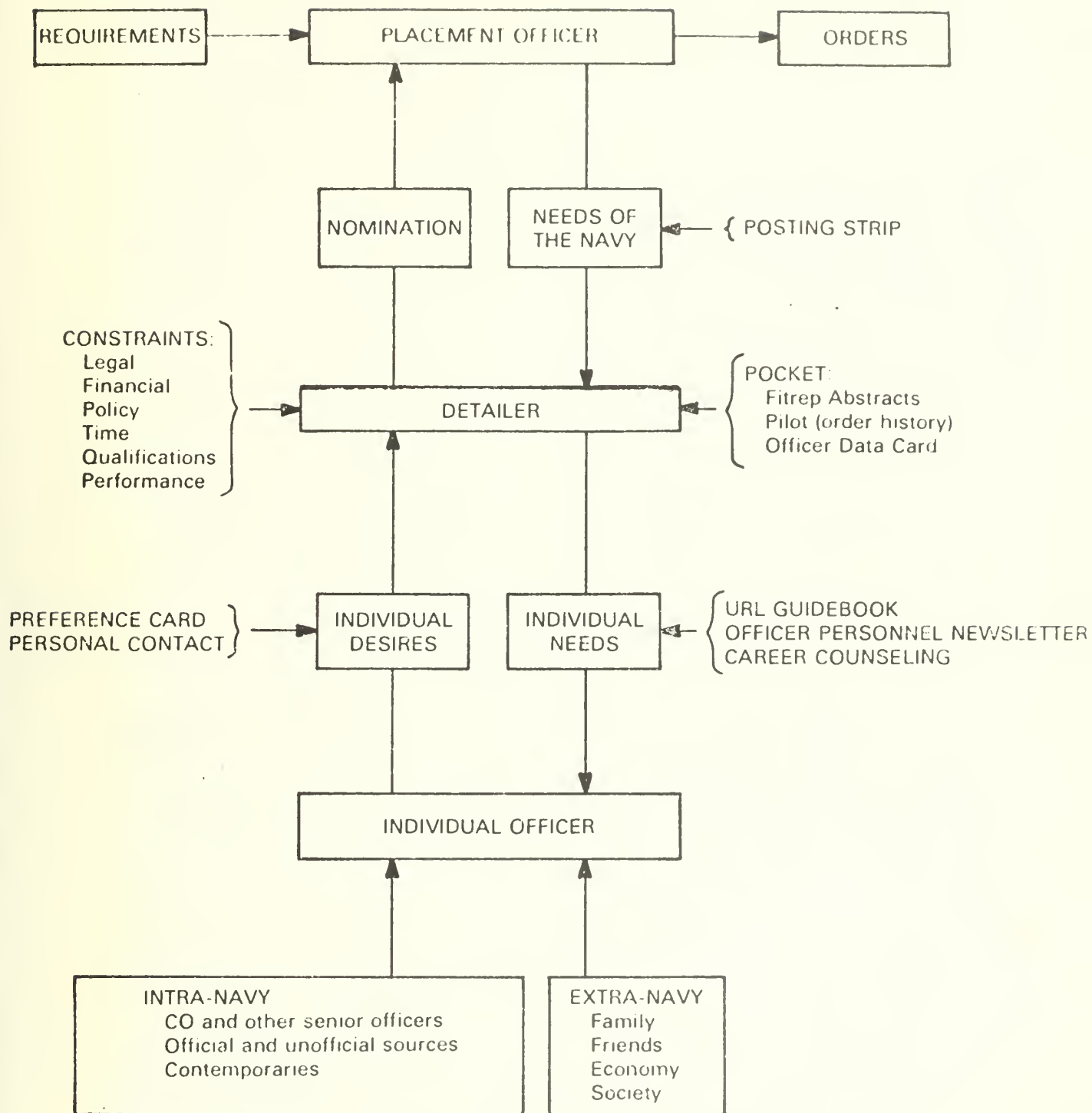


Figure 1. Surface warfare officer assignment process (Holzbach, 1979).

often conflicting and nebulous demands make for the detailer are many. Some have been discussed in an earlier report by the author (Arima, 1981a). The bottom line of the detailing process may be its impact on the retention of officers, as suggested in the discussion above and by Holzbach (1970) and Derr (1980b).

The retention of officers is of great importance to the Navy because of the lengthy time, effort, and money that are required to qualify individuals to perform in critical warfare functions. In addition, retention of officers is required to permit selectivity or choice for promotions, specialized training and education, and key assignments. Also, knowledge about factors affecting retention and continuation on active duty is essential for modeling the officer force to permit accurate forecasting, planning, and policy making (Arima, 1981b).

### Evaluating the Navy's Detailing and Assignment Process

Because of the key role of the detailer in the assignment process, there was a realization and conviction in the Office of the DCNO(MPT) and the Distribution Division of NMPC of the necessity to evaluate consumer satisfaction with detailing (Arima, 1981a).

A measure of satisfaction is, however, without meaning unless inferences can be made about behaviors that will occur as a consequence of satisfaction. If this contingency is accepted as necessary, it will generate interest in the antecedents of the satisfaction measure as well, because it is only there that changes could be instituted to modify the behavior at the end of the chain. This model, in its simplest form, is shown in Figure 2.

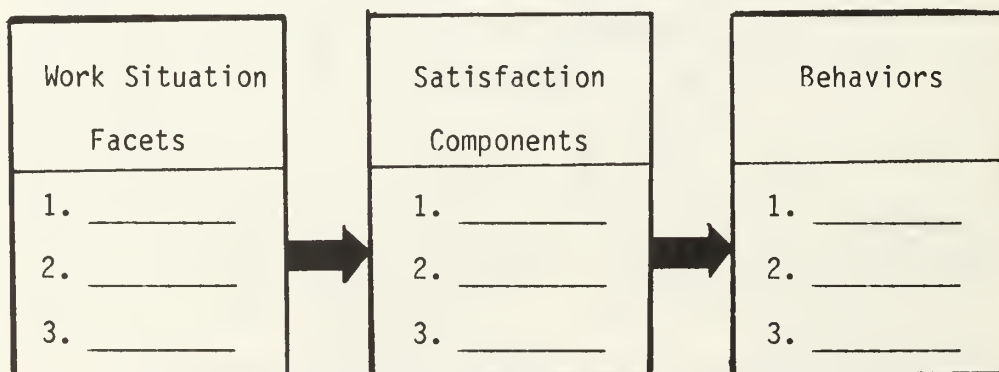


Figure 2. Simple model of satisfaction and its precedents and consequences.

Typically, job facets might include the work itself, conditions of work, supervision, pay, promotions, and coworkers. The measure of satisfaction may include component measures corresponding to the job facets (Smith, Kendall, & Hulin, 1969). The output behaviors might include such categories as attendance, tenure, and production.

In the situation involving the evaluation of the detailing and assignment of individuals in the service, the decision maker's model of the process may naively substitute the behavioral element of the preceding model by other psychological attributes in the manner shown in Figure 3.

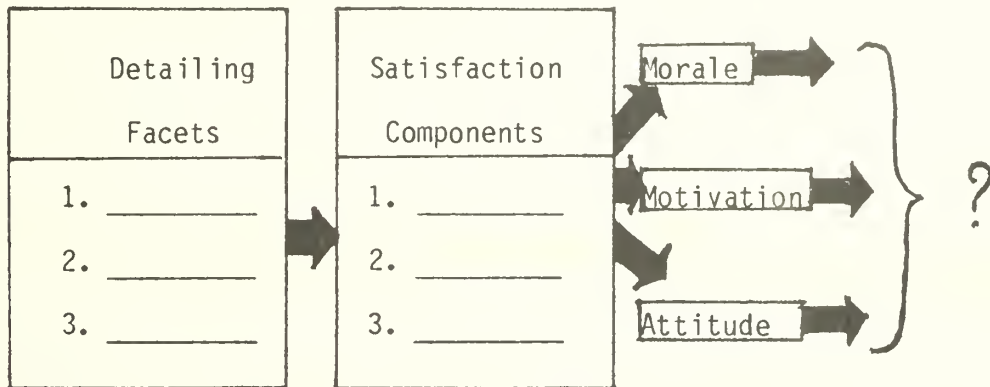


Figure 3. Naive model of the detailing-satisfaction relationship and its consequences.

This is understandable because the indoctrination and training of the officer places high value on such attributes as indicators of unit health. The behavioral consequences of the satisfaction measure are not considered or are likely subsumed in privately held, but widely shared, definitions of high morale, good motivation, and the right attitudes. Obviously, from an evaluation standpoint, these attributes are in the same category--i.e., attitudes--as the satisfaction measure and require further elaboration of their consequences. Further elaboration by the decision maker might resort to more specific definitions of these attitudes, such as a "gung ho" attitude as an example of morale, a "can do" attitude to go with motivation, and a general, positive approach to leadership, authority, and service values to elaborate the concept of a "right attitude." These elaborations can be translated into two general classes of behavior: (1) the "gung ho" and "can do" elements can be related to job performance and productivity and (2) the strictly attitudinal components can be related to gross categories of approach behaviors such as an absence of tardiness or absenteeism and continuation in service (retention, low turnover). At this stage, it is possible to diagram a simple model of satisfaction with the detailing-assignment process that corresponds with the model in Figure 2.

This could be called an intuitive model of the process and is shown in Figure 4.

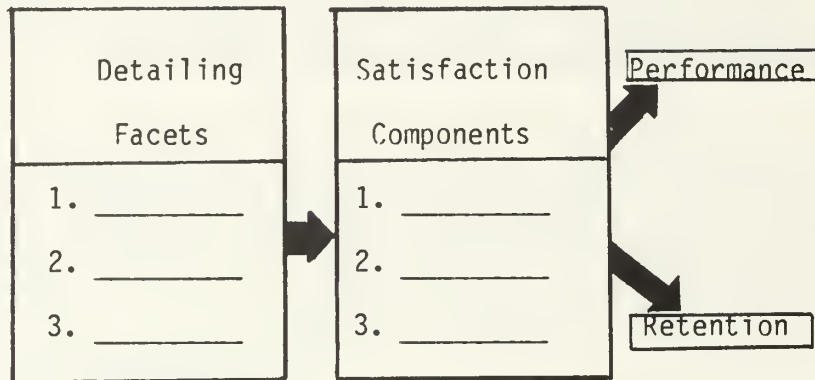


Figure 4. Simple (intuitive) model of the detailing-satisfaction relationship and its consequents.

Unfortunately, research over the last 50 years has been unable to show any consistent relationship between satisfaction and performance, although the human relations movement in the '30s and later exerted great efforts to measure and improve satisfaction on the unquestioned assumption that a satisfied worker was a good worker. On the other hand, a very modest, but positive relationship has been consistently found between satisfaction and job tenure. These generalizations are common to reviews of the job satisfaction literature over a span of years and literally thousands of studies (Brayfield & Crockett, 1955; Locke, 1976; Miner & Dachler, 1973; Mobely, Griffeth, Hand, & Meglino, 1979; Porter & Steers, 1973; Schwab & Cummings, 1970; Vroom, 1964). Contrary to the naive or common-sense view of the human relations approach, but not suprisingly, the reverse relationship--that performance leads to satisfaction--has been theorized and empirically supported (Locke, 1976; Porter & Lawler, 1968; Schwab & Cummings, 1970; Vroom, 1964). The situation could well be the same in military organizations. Those that perform well have high morale, good motivation, and the right attitudes.

The research results make it advisable to modify the intuitive detailing-satisfaction model in Figure 4. Job performance should precede and be a contributor to satisfaction with detailing. The performance record in the "pocket" available to the detailer would identify a high performer as a prime candidate for a highly desirable, highly visible, and demanding billet. He or she would be treated with consideration by the detailer and would receive a good billet from a "ticket punching," career-development standpoint. Moreover, the detailer-client relationship would proceed more smoothly and pleasantly when a preferred billet is involved in the transaction versus the case where the detailer must dispose of an obviously undesirable billet. Accordingly, a strong case can be



made for (1) job performance coming before satisfaction with detailing and (2) the new billet, itself, being an important contributor to satisfaction with detailing independent of the actions and behavior of the detailer. The fully elaborated model of the antecedents and consequents associated with satisfaction with detailing that incorporates these considerations is shown in Figure 5. The triad in the figure refers to the relative values the individual being reassigned places on the members of the triad of detailing, the way it was handled by the detailer, and the officer's perception or evaluation of the way the triad was handled. Involvement refers to the degree the individual being reassigned was a participant in the decision-making process and his or her evaluation of that participation.

This discussion of the evaluation of detailing would not be complete without further examination of the relationship between satisfaction and retention. Specifically, the consistent but low relationship should be addressed. Locke (1976) states that found relationships are usually below a correlation of  $-.40$ . First, it is assumed that satisfaction is an attitude and that attitudes have utility because they are associated with the propensity to act in certain ways (Scott, 1968). The possible bases for low relationships between attitudes and behaviors have been analyzed by Ajzen and Fishbein (1977, 1980) based on the Fishbein and Ajzen (1975) model. The gist of their arguments is that attitudes and behaviors are usually too generally defined to predict or postdict specific behaviors and that attitudes occupy a position intermediate among other psychological processes that also contribute to the ultimate behavior of interest. For example, attitudes are said to lie between beliefs and the intent to perform specific behaviors. But contributing to intent--which is the immediate precursor of behavior--are other factors, chief among which are subjective norms regarding performance of the particular behavior. The intent and the performance of specific behaviors depends on the time interval between the expressed intent and the actual occurrence of the behavior. As the time interval increases, many factors may intervene to thwart the intent. Finally, they emphasize that the behavior of interest must be specific with respect to the action to be taken, the target of the action, and the context and time within which the behavior is to take place in order to permit its prediction.

While this study was not designed around the attitude-behavior model of Fishbein and Ajzen, it does incorporate some of their key concepts. The study has a specific measure of intent with respect to continuing on active duty; a target of action which is the individual's Navy career; and a context and time defined by the detailing processes involved in their reassignment during the spring-summer of 1980. Unfortunately, measures of beliefs that are in this study--such as the perceived career value of the new assignment, preferred and unpreferred assignments at this particular time, and individual expressions of the emphasis that should be placed on the elements of the triad of detailing--are not



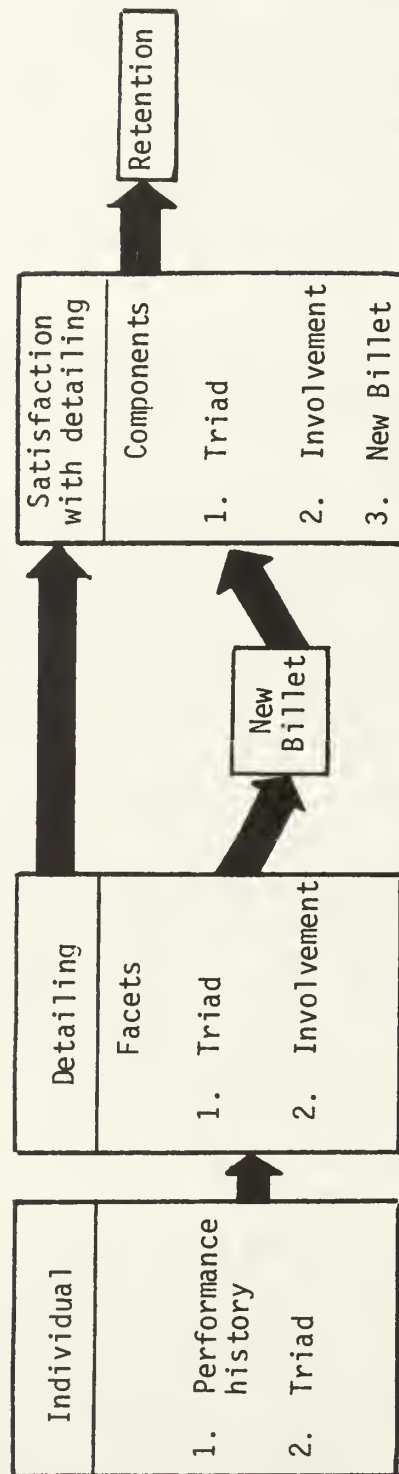


Figure 5. Model for evaluation of the antecedent, consequent, and mediating relationships associated with satisfaction with detailing.

consistent with the concept of beliefs in the Fishbein and Ajzen model. Measures of sources of information that the individual used to consummate the new assignment might provide insights into the strength of subjective norms regarding the career intent measure.

Another, and important, factor that will contribute to the low relationship between satisfaction and retention is that, after the period of initial, obligatory service, the survivor curve for Naval officers by years of service is essentially flat up to 20 yrs. of service (Figure 6). That is, retention is extremely high for officers with length of service in that range. The first, precipitous drop is created by those who leave after a period of mandatory service, and the drop at 20 yrs. is created by those who retire as soon as they become eligible for retirement.

Accordingly, this study of consumer reactions to detailing should provide insight into the components that make up satisfaction with detailing and the impact that satisfaction with detailing may have on career intentions, even if the expectation must be that the relationships found will only be modest.

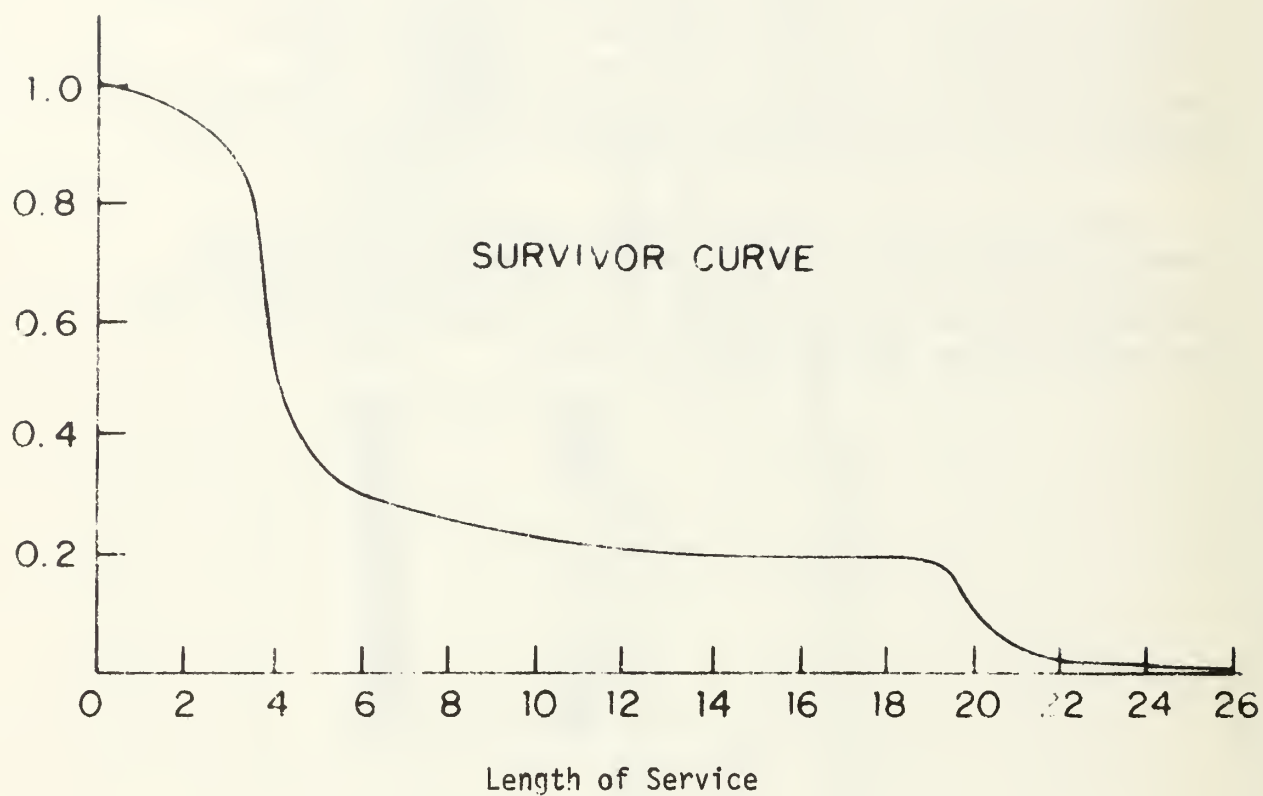


Figure 6. The survivor curve for Navy line officers. The curve shows the probability that an individual officer will be serving on active duty as a function of length of service. (From Grinold, 1979.)

## METHOD

### 1980 URL Survey

The data for this study were generated in a questionnaire survey of unrestricted line officers of the Navy who received PCS orders (other than entering or leaving active duty) in the spring and summer of 1980. The purposes of the survey were to provide feedback on the detailing process and to determine the impact that reassignments might have on the retention of officers at specific career stages. The surveys were mailed with orders during the period, April through July, and a cutoff date for their return receipt was the end of October. The mailings were done by the Distribution Division of NMPC, and returns were received and processed at the Naval Postgraduate School (NPS). Over 1,000 completed questionnaires were received during the survey period, of which 926 met the appropriate criteria--URL officers, only actual change of station (reassignment) orders. The return rate could not be calculated because it was impossible, for a variety of administrative reasons, to determine exactly how many surveys were mailed. The worst-case estimate was a return rate of 25 percent; the best, 80 percent; and an average estimate was 50 percent. Those who were responsible for mailing the surveys thought that the 80-percent returns was the best estimate.

Another problem associated with the survey administration concerned the handling of personal data about the individual officer. The plan was to have that information sent directly to the NPS with a case number assigned by NMPC to be used to pair the personal data with the questionnaire. At the last minute, the Distribution Division decided to ask the respondent to provide most of the personal data by printing an open-ended questionnaire on the back of the cover letter forwarding and explaining the survey form. As a result, 212 (23.9 percent) of the 926 useable returns did not provide the personal data. In some instances, the surveys and orders had been mailed in bulk to some stations--rather than individually--and it was not possible to pair the personal data forms with the questionnaire when the returns were also received in bulk. This study uses the total sample of 926 cases, and any analysis involving or requiring individual information, such as rank or designator, will be left for subsequent study.

Complete details concerning the survey, the data processing conventions and codebook, copies of the actual survey materials, and verbatim reproduction of the free responses to an open-ended question on satisfaction with detailing are provided in a report by Arima (1981a).

## Variables

The variables that will be used in this study can be categorized into those that deal with the detailing process, the new billet, and the career intent of the respondent. Each variable will be described as to its source, content and scope, and measurement. The code name given the variables will also be provided in full capitals.

### Detailing Variables

Overall Satisfaction with Detailing (SATISFY). The respondent was asked to provide his feelings toward the placement-assignment process on a 5-point, bipolar Likert scale that ranged from "Very satisfied" (1) to "Very dissatisfied" (5).

Evaluation of the Detailing Triad. The respondent was asked to evaluate the consideration given to each leg of the triad of detailing on a 5-point, unipolar Likert scale that ranged from "To a maximum extent" (1) to "To no extent" (5). The individual variables were:

PERSONAL--consideration given to personal needs.

CAREER-- consideration given to career needs.

NAVY--consideration given to the needs of the Navy.

Beliefs about the Triad of Detailing. The respondent was asked to indicate how much relative emphasis should be given each member of the triad of detailing. He or she did this by distributing 100% among the triad. Accordingly, each member has a potential range from 0 to 99 (100 was coded 99). Fractional amounts, such as 33-1/3%, were truncated. The individual variables were:

TRIAD1--Needs of the Navy

TRIAD2--Individual career needs

TRIAD3--Personal desires

Compatibility between Beliefs about Detailing and the Evaluation of Detailing as Experience. A method was sought to take the evaluation and belief variables and create a composite attitude measure that would combine the cognitive (belief) and affective (evaluation) components into an overall attitude measure that could be directly related to the conative component, the intent to pursue



a particular behavior--e.g., continue active service--in the manner suggested by Ajzen and Fishbein (1980). As noted previously, the variables are not conceptually appropriate, but more importantly, they cannot be combined multiplicatively as the Ajzen-Fishbein model requires because the values of the belief variables--TRIAD1, TRIAD2, TRIAD3--do not constitute a magnitude continuum. For example, if a person felt that all three legs of the triad should be emphasized equally, then the value could only be 33-1/3 for each. Their values, then, provide a means for the respondent to communicate the desired pattern of emphasis and the spread within the pattern. Accordingly, 13 mutually exclusive and exhaustive categories of patterns were identified to nominally scale both the belief and evaluation variables on the same criteria. The scheme is shown in Table 1. When the scheme was applied to the belief variables, the resulting variable was called BELIEF. When the scheme was applied to the evaluation variables, the resulting variable was named EVAL. Finally, a dummy variable called COMPAT was created that had a value of 1 when BELIEF was equal to EVAL and a zero, otherwise.

Personal involvement in the detailing process (INVOLVMT). The respondent was asked to indicate on a 5-point, unipolar Likert scale the extent to which he or she was personally involved in the decision process leading to the new billet. The scale ranged from "To a maximum extent" (1) to "To no extent" (5).

Source of Information Used. The respondent used a listing of sources of information to check those he or she had used to determine what billets were available for this reassignment--and presumably their relative worth. Each source was a dummy variable scored 1 if it was checked and zero, otherwise. The resulting variables were:

TIMES--Navy Times

Persp--Officer Personnel Newsletter (Perspective)

BILSUM--Officer Billet Summary

CO--Commanding Officer

SENIOR--Another senior officer

BOOK--Career Planning guidebook

DETAIL--Detailer

PEER--Peer group

OTHER--Sources other than the above

Table 1

Scheme for Coding Belief and  
Evaluation Variable Patterns

Code	Pattern (Hi → Lo)	Legend
1	<u>1 - 2 - 3</u>	1 = NAVY, TRIAD1
2	<u>1 - 2</u> - 3	2 = CAREER, TRIAD2
3	<u>1 - 3</u> - 2	3 = PERSONAL, TRIAD3
4	<u>2 - 3</u> - 1	
5	1 - 2 - 3	Underlining indicates ties
6	1 - 3 - 2	
7	1 - <u>2 - 3</u>	<u>1 - 2</u> = <u>2 - 1</u>
8	2 - 1 - 3	
9	2 - 3 - 1	
10	2 - <u>1 - 3</u>	
11	3 - 1 - 2	
12	3 - 2 - 1	
13	3 - <u>1 - 2</u>	

### Billet Variables

Career enhancement of the new assignment (NEWBILL). The respondent was provided a 10-step ladder on which to indicate the value of the new billet with respect to his or her overall career development. The bottom of the ladder (step 1) was labelled the worst possible billet available at this time, and the top (step 10) was labelled the best possible billet. The variable was scored from 1 to 10 according to the step selected.

### Timeliness of the new billet (TIMELY).

The respondent indicated the timeliness of the new billet by placing an "X" in the appropriate space of a 13-unit, bipolar, graphic-rating scale. The midpoint space was labeled "Present" and was chosen if the new billet came at an appropriate time in the respondent's career. The six spaces to the right of "Present" permitted the respondent to indicate that the new billet should have come from 1 to 6-or-more years in the future. The six spaces to the left were similarly used to indicate that the new billet was more appropriate in the respondent's past. The responses were coded from 1 (6-or-more years in the past) to 13 (6-or-more years in the future). The present received a value of 7.

TIMELY will also be used as an interval-scaled variable (STIME) with 7 representing the present and the values, 6 to 1 representing how many years away (disregarding whether past or present) the new billet should have occurred in the individual's career pattern. That is, a 6 indicated that the billet should have occurred 1 yr. in the past or future, and a 1 indicated that it should have occurred 6-or-more yrs. in the past or future.

Billet preference (BILPREF). The respondent was requested to check whether the most preferred billet for this move was at sea or on shore and whether the least preferred was a sea or shore billet. The following matrix using the two dimensions was used to categorize the response pattern:

		Preference	
		Most	Least
<u>Location</u>	<u>Sea</u>	A	B
	<u>Shore</u>	C	D

The appropriate patterns were AB, AD, CB, and CD. Most of the respondents (567) fell into one of these patterns. An additional 64 respondents selected only one of the categories, but 225 selected all of them (ABCD). Whether most or least preferred, one set of billet characteristics was presented for sea billets and another set, for shore billets. The respondent checked the characteristics that were appropriate for the billet being described--i.e., best or worst.

The sea billet choices used in this study are shown below: Other choices were also available, but they pertained to specific warfare communities and will not be used here. The choices were used as dummy variables in analyses. Their dummy names are shown in parentheses under "choices" in the list. Those marked with an asterisk were used as the reference or control variable and not coded. Where there is only one choice, it was used as a 1, 0 dummy. The dummy names included an M or L in actual use to indicate the most preferred and least preferred category, respectively.

<u>Variable</u>	<u>Choices (Dummy name)</u>
FLEET	Atlantic (F1) *Pacific Either Atlantic or Pacific (F2)
OVERHAUL	Checked or blank (OV)
DEPLOYED	Checked or blank (DP)

The shore billets used in this study used the same conventions as the sea billets and were:

<u>Variable</u>	<u>Choices (Dummy name)</u>
SHORE	Washington (SR1) CONUS East Coast (SR2) CONUS West Coast (SR3) *CONUS Other Oversea shore (SR4)
TRAIN (Training)	Checked or blank (TR1)
OTM	Operational (01) Technical/Managerial (02) *Blank



<u>Variable</u>	<u>Choices (Dummy name)</u>
BILLET	General duty (1000) billet (B1) *Warfare specialist (1050) billet Subspecialty coded billet (B2)
STUDENT	Student at service college (ED1) Student in graduate education (ED2) *Blank

### Career Intent Variables

Career intent change. The respondents were given different set of items to elicit the impact of the new assignment and the detailing process on the individual's career intentions.

For those not eligible to retire, the items were:

1. Leave service at earliest opportunity (Leave)
2. Continue active duty beyond obligation (Continue)
3. Serve until retirement eligible (Serve)
4. Undecided

For those eligible to retire, the items were:

5. Retire at earliest opportunity (Retire)
6. Continue active duty (Continue)
7. Undecided

The respondent indicated what his or her career intention was prior to knowledge of the new billet and what it was after the new billet was known. Since each of the "before" categories could be paired with any of the four (including itself) for the "after" category, there were 16 possible pairings for the non-retirement-eligible group. For example, a 1-2 pairing described a person who had planned on leaving the service at the earliest opportunity, but, after receiving the new assignment, had decided to continue on active duty. Similarly, there were nine possible pairings for the retirement-eligible group. A 6-5 pairing identified an individual who had planned on continuing active duty, but having learned of the new assignment, decided to retire as soon as possible.

The 16 outcomes for the non-retirement eligible and 9 for the retirement-eligible were arbitrarily assigned to a 10-value,

interval scale on the basis of maximizing retention for the former and maximizing continuation on active duty for the latter. The difficult aspect of the scaling was the no-change items. While it could be maintained that there was no career-intent impact with the no-change categories, the outcome "leave-leave" was intuitively not as desirable as "continue-continue" on the scaling criteria. This 10-step variable was called INTCHGF and when it was converted to logarithms, INTCHGFL. The outcomes assigned to the 10 steps are shown in Table 2.

## Analysis

The analyses will first develop descriptive statistics to present central tendencies and distributions of the continuous variables. First-order relationships among the key variables will be calculated to observe trends and their implications for other, contemplated analyses. This will be followed by a path analysis to evaluate the hypothesized links in the evaluation model. Finally, a stepwise, multiple-regression analysis of career intent change using all of the variables will be conducted as a baseline against which the path-analytic results will be compared.

## Path Analysis

The path analysis will be conducted to evaluate the hypothesized linkages presented in the evaluation model (Figure 5). The form and contributions of the components of the overall satisfaction measure will first be analyzed, followed by an evaluation of the precedents of the new-billet satisfaction measure. Then, a measure to correspond with subjective norms in the Fishbein-Ajzen model will be created and combined with the satisfaction measure to predict career-intent change.

## Satisfaction

The contribution of the components of detailing shown in the model in Figure 5 will be addressed in stages. First, each of the evaluation variables, dummy-coded forms of the belief variable (BELIEF), and the compatibility dummy (COMPAT) will be entered into a multiple regression equation with the overall satisfaction measure (SATISFY) as the dependent variable. The BELIEF dummies will be created as follows:

Table 2  
Coding Career-Intent Change  
for the Variable INTCHGF

Degree of Favorableness	INTCHGF Value	Career-Intent Change*
Least	1	31
	2	21, 65
	3	34, 41, 75
	4	11, 24, 55, 67
	5	32, 44, 77
	6	14, 22, 57, 66
	7	33, 42, 76
	8	12, 23, 56
	9	43
Most	10	13

\* See text for explanation of career-intent change codes.

<u>RELIEF</u> <u>Categories</u>	<u>Dummy</u>					<u>Dummy</u> <u>Description</u>
	<u>B1</u>	<u>B2</u>	<u>B3</u>	<u>B4</u>	<u>B5</u>	
1	1	0	0	0	0	Equal emphasis
2 & 3	0	1	0	0	0	Tied priority, 1-2, 1-3
4	0	0	1	0	0	Tied priority, 2-3
*5, 6, 7	0	0	0	0	0	Navy needs priority
8, 9, 10	0	0	0	1	0	Career needs priority
11, 12, 13	0	0	0	0	1	Personal needs priority

The RELIEF categories are described in Table 1. The asterisk, above, denotes the comparison or reference variable. In the dummy-description column, 1 refers to the needs of the Navy; 2, career needs; and 3, personal needs. Variables contributing significantly to the prediction of SATISFY at the .05 probability level will be retained. Then the variables INVOLVMT AND NEWBILL will be added independently to the equations from the preceding step to compare how much each adds to the prediction of overall satisfaction (SATISFY). Finally, they will be entered together to determine what their effects are synergistically. These steps will complete the analysis of the component measures contributing to overall satisfaction.

#### New Billet

While NEWBILL was used in the satisfaction equation, it was argued in the model formulation that the past performance of the individual and his or her experience--i.e., performance history--were the primary determinants of the new billet assignment. Unfortunately, the necessary information to test this crucial point is not available. There are, however, several concurrent measures that may have an effect on the degree of acceptance of the new billet. The first of these are the billet preference variables. Stepwise multiple regression will be used to determine which, if any, contribute to the acceptability of the new billet in furthering one's career. Following this stage, the timeliness (TIMELY) measure will be added to the prediction equation. This will complete the analysis of the components of a preferred billet insofar as the limited data permit.



### Subjective Norms

The Fishbein-Ajzen model states that the subjective norms about the behavior being predicted are distinct from attitudes and must be considered as having a direct influence on intentions. Subjective norms have, like attitudes, two stages in their formulation. First, there are the beliefs that social institutions and persons might have regarding the subject's performance of the behavior in question. These beliefs are then to be multiplied by the respondent's motivation to comply with them to arrive at a measure of the subjective norm to perform the behavior in question. The variables in this study do not fit this sequence, so a substitute measure is necessary. It will be assumed that an individual who makes greater use of organizational sources of information to enhance his or her possibility of ending up with an advantageous move is more motivated to comply with prevailing organizational wisdom. Using the variable set of information sources used, a subjective norm variable (SUMINF) will be created by simply summing the values for the following 0,1 variables: PERSP, CO, SENIOR, BOOK, and DETAIL. (See Sources of Information used under variables, above, for definition of these variables.)

### Career Intent

Using multiple-regression analysis, the impact of the detailing-assignment experience on the individual's career intentions (INTCHGF) will be assessed by using a satisfaction variable or equation and a subjective norm variable. This will complete the path analysis.

### Stepwise Multiple Regression Analysis

Since the evaluation model was designed, primarily, to achieve an understanding of the processes involved in the formation of individual reactions to midcareer moves, it may be far from optimal in predicting career-intention impact on a strictly empirical basis. In order to have the latter for comparison--a control condition--a stepwise multiple regression analysis will be conducted using INTCHGFL as the dependent variable and all of the variables in the study as independent variables with a potential for significantly (at the  $p = .05$  level) contributing to the prediction of career intention change. It will be difficult to assess the comparative effectiveness of the results--model vs. stepwise regression--since the adjusted  $r^2$  value in the latter case cannot be rigorously determined (Wilkinson, 1979).

### Statistical Procedures

The Statistical Package for the Social Sciences (SPSS) (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975; Hull & Nie, 1979) will be used for all analyses.



## RESULTS

### Descriptive Statistics

The means and standard deviations of the continuous variables in the study are given in Table 3.

### Detailing Variables

Figure 7 shows the distribution of respondents on the overall satisfaction variable with almost two-thirds of them being very satisfied or satisfied. Figure 8 shows the distribution of respondents on the involvement variable, and here again, almost two-thirds state that they were significantly involved in the decision-making process. The distribution of respondents on each "leg" of the detailing triad is shown in Figure 9. Here, it is obvious that the respondents perceived a greater emphasis being placed on the needs of the Navy (maximum extent checked by 36.2 percent), while the distributions for the emphasis placed on career needs and personal desires are extremely similar and show an 8 to 10 percent less emphasis in the "maximum extent" category. The evaluation of the detailing experienced is quite similar to the mean beliefs about the triad of detailing (Table 3). Finally, of the detailing variables, the frequency of information sources used in determining billet availability is presented in Table 4. The detailer, by a large margin, is listed as the most frequent source, followed by one's peer group. Except for the Navy Times and the Career Planning Guidebook, the other sources are uniformly referred to by a considerable number of officers.

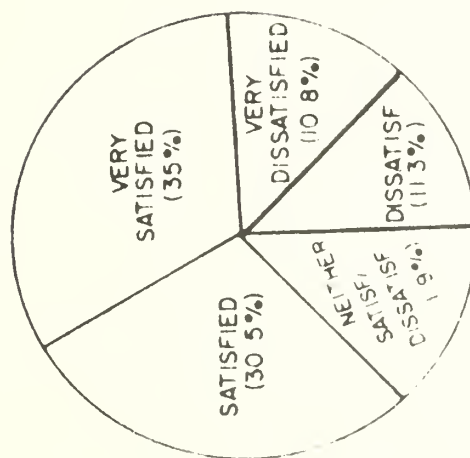
### New Billet Variables

The new billet was seen as being quite favorable and career enhancing with a mean of 7.59 on a scale from 1 to 10 (Table 3). The distribution of individuals over the various categories is shown in Figure 10. The most frequently chosen was 10--the "best possible billet." Categories 8 and 9 were also frequently chosen. The distribution of respondents on the measure of timeliness of the new assignment is shown in Figure 11. Well over half of the respondents selected the present, while most of those who did not appeared to believe that the new assignment should have come earlier in their careers.

The billet preferences of those who answered the question in the desired manner (567) are shown in Table 5. Among the sea billets, the listed categories are chosen with nearly equal frequency as the most- and least-preferred billets, except for duty involving a ship in overhaul, which is quite unpopular. For shore

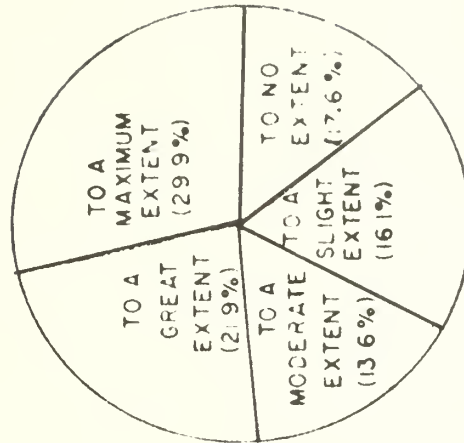
Table 3  
Means and Standard Deviations of the  
Study's Continuous Variables

Variable	N	Mean	SD
Overall satisfaction (SATISFY)	921	2.321	1.343
Evaluation of Detailing			
NAVY	921	2.250	1.256
CAREER	921	2.591	1.350
PERSONAL	922	2.562	1.381
Beliefs about Detailing			
TRIAD1 (Navy)	908	39.437	15.179
TRIAD2 (Career)	921	27.355	12.509
TRIAD3 (Personal)	921	31.049	13.937
Involvement (INVOLVMT)	918	2.693	1.436
New billet (NEWBILL)	895	7.591	2.427
Timeliness			
TIMELY	873	6.430	1.765
STIME	873	6.031	1.564
Career intent change			
INTCHGF	840	5.963	1.607
INTCHGFL	840	0.754	0.152
Information sources used			
SUMINFO	768	1.868	0.994



N = 921

Figure 7. Respondents' (by percentage of overall population) feeling of overall satisfaction with the placement/Assignment Process.

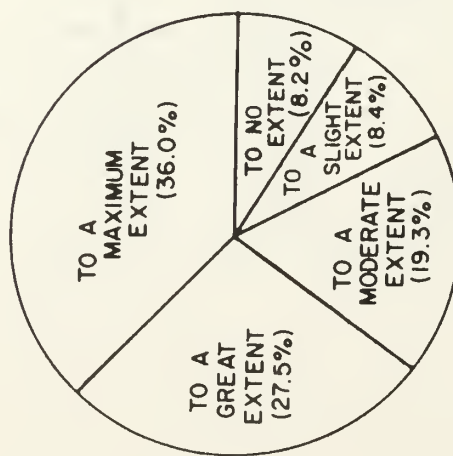


N = 918

Figure 8. Respondents' (by percentage of overall population) decrease of involvement in the new Billet Decision Making Process.

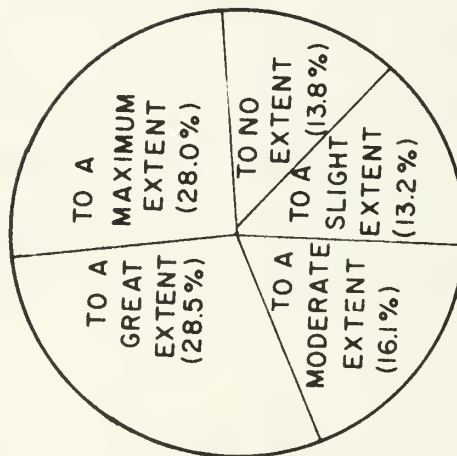


CONSIDERATION GIVEN  
TO THE NEEDS OF THE NAVY



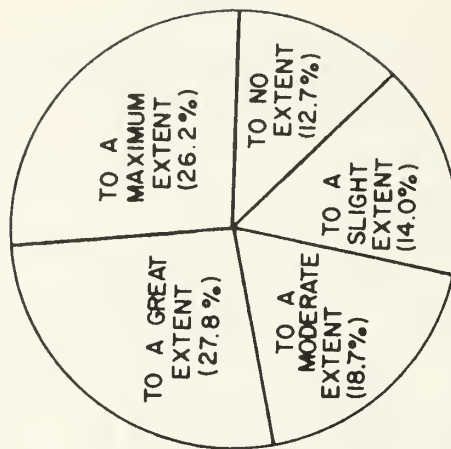
N = 921

CONSIDERATION GIVEN  
TO PERSONAL DESIRES



N = 922

CONSIDERATION GIVEN  
TO CAREER NEEDS



N = 921

Figure 9. Respondents' evaluation (by percentage of overall population) of emphasis on the different aspects of the "TRIAD" of Navy detailing during the Placement/Assignment process.

Table 4

Frequency of Information Sources Used  
in Determining Available Billet Assignments

Information Source	Absolute Frequency (Numbers)	Percentage of Population
Navy Times	70	7.55
Officer Personnel Newsletter	269	29.04
Officer Billet Summary	281	30.34
Commanding Officer	204	22.03
Another Senior Officer	253	27.32
Career Planning Guidebook	134	14.47
Detailer	575	62.09
Peer Group	343	37.04
Other	173	18.68

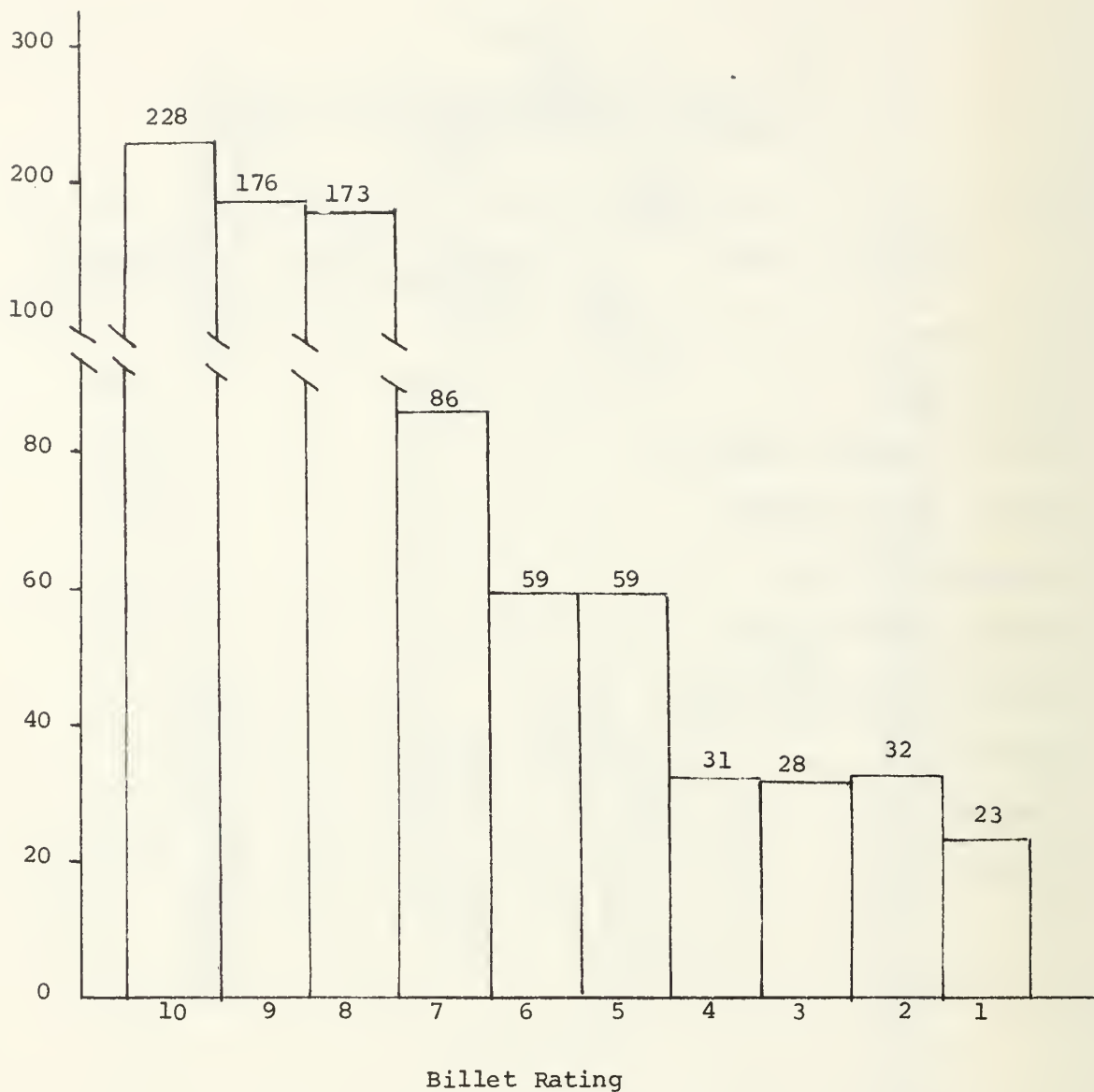


Figure 10. Histogram of "Billet Ratings" on a scale of 1 to 10, with a 10 signifying a "best" billet and a 1 signifying a "worst" billet.

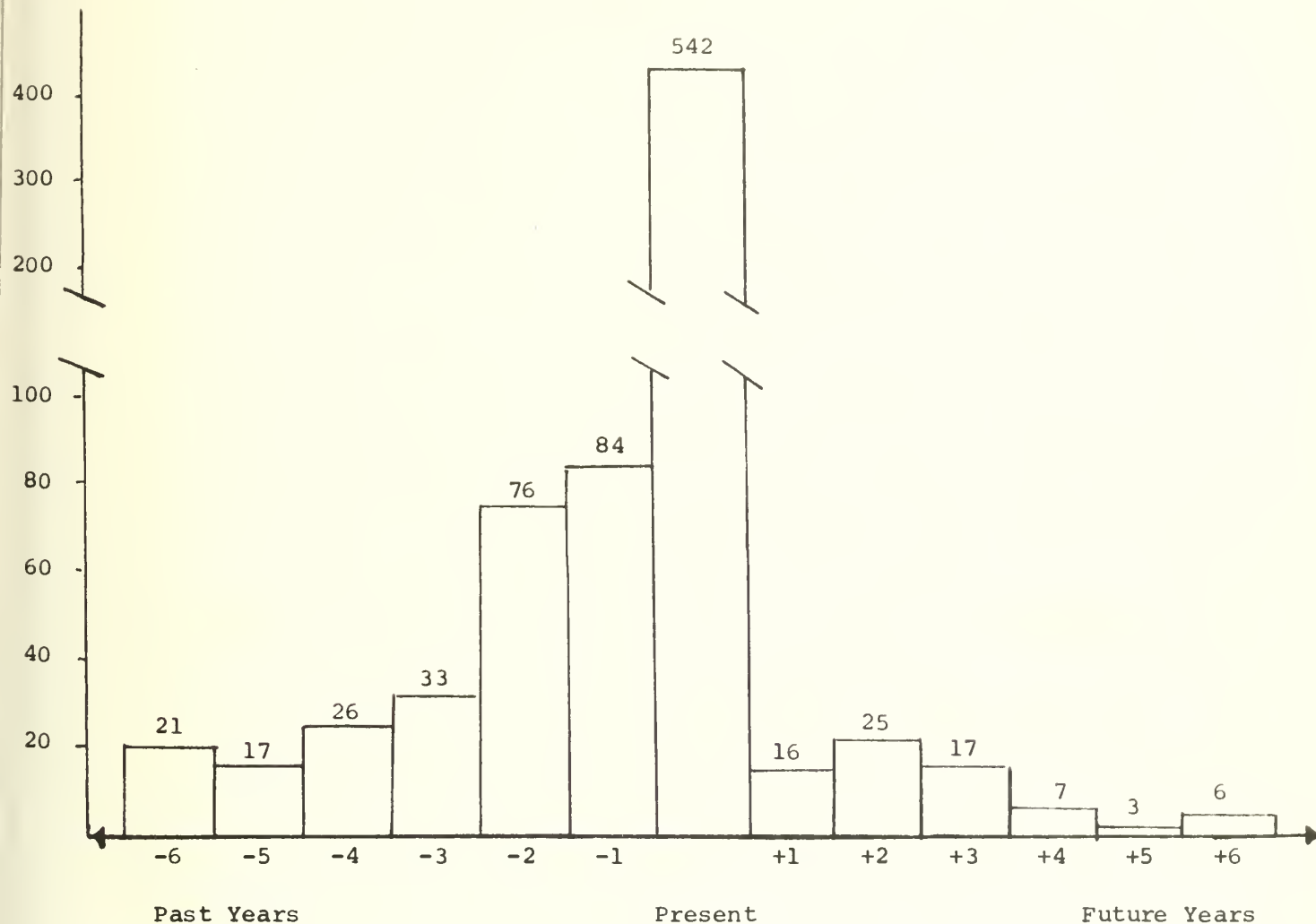


Figure 11. Histogram of respondents' perceived timeliness of the next billet assignment. The frequencies to the left of center indicate the number of officers who felt their next assignment should have come earlier in their careers. Those to the right of center indicate the number of officers who felt their next assignment should have come later.

Table 5  
Billet Preference

Category	Most Preferred		Least Preferred	
	N	%	N	%
Sea Billets				
Atlantic Fleet	232	25.1	244	26.3
Pacific Fleet	218	23.5	170	18.4
Either Atlantic or Pacific	88	9.5	44	4.8
Overhaul	27	2.9	349	37.7
Forward Deployed	187	20.2	180	19.4
Shore Billets				
Washington	98	10.6	207	22.4
CONUS East Coast	174	18.8	55	5.9
CONUS West Coast	183	19.8	38	4.1
CONUS Other	27	2.9	54	5.8
Overseas Shore	75	8.1	121	13.1
Training	171	18.5	149	16.1
Operational	278	30.0	98	10.6
Technical Managerial	196	21.2	226	24.4
General Duty (1000 Billet)	104	11.2	255	27.5
Warfare Specialist (1050 Billet)	128	13.8	52	5.6
Subspecialty Coded Billet	200	21.6	60	6.5
Student (Service College)	146	15.8	153	16.5
Student (Graduate Education)	249	26.9	71	7.7



billets, operational billets and graduate education are the most popular choices, while Washington duty, technical managerial billets, and general duty (1000) billets for which any URL officer is qualified are least preferred. A training assignment appears to be about equally preferred and not preferred. With the many contradictions in the table--i.e., the same billet is most and least preferred--the assignment process appears to have done an excellent job in meeting these likes and dislikes as reflected in the ratings of the new assignment. It should be noted that the database available for this study did not permit an assessment of whether an individual's new billet was consistent with his or her expressed preferences.

### Career Intent Variables

The career intention of the respondents prior to the receipt of the new billet assignment is shown separately in Table 6 for those not retirement eligible and those eligible to retire. In the former category, two-thirds of the respondents had committed themselves to staying on active duty, while the majority of the others was in the undecided category. Similarly, a large percentage (73.4) of the retirement eligible was planning to continue on active duty. These intention categories can be compared to the survivor curve in Figure 6. Those planning to remain on active duty are respresented, primarily, by the extended flat portions of the curve before and after 20 yrs. of service. The others are respresented in the dynamic, nearly step functions of the curve at 4 and 20 yrs. of service.

The change in intention after learning of the new assignment, including a no-change category as a zero change in intention, is shown in Table 7. In the category not eligible to retire, only 24 of the 76 whose prior intent had been to leave the service (Table 6) remained with that committment. On the other hand, some in the other categories changed their intent to leaving the service so that there were now 60 individuals who had decided to leave the service, an apparently slight gain in retention. The other notable trend among the not retirement eligible is that most of those (368) who were undecided or had the intent of continuing service remained in those categories after knowledge of the new billet. Trends similar to these are also evident for the retirement eligible.

A summary of the directions of change reflected in Table 7 is presented in Table 8. Given the following rank ordering of self-committment to serving on active duty a negative change was defined as the movement from a higher to lower committment, and a positive change, from lower to higher in the ordering.

Table 6  
Career Intention Prior to Receipt  
of New Billet Assignment

Intent	Absolute Frequency (Numbers)*	Relative Frequency (Percent)	
		of Total	Within Major Groupings
Not Retirement Eligible			
Leave Service	76	9.1	10.4
Continue Active Duty	199	23.7	27.2
Serve Until Retirement	287	34.1	39.3
Undecided	169	20.1	23.1
(Subtotal)	(731)	(87.0)	(100.0)
Retirement Eligible			
Retire	14	1.7	12.8
Continue Active Duty	80	9.5	73.4
Undecided	15	1.8	13.8
(Subtotal)	(109)	(13.0)	(100.0)
Total	840	100.0	

\* 86 Cases Missing.

Table 7A  
Change in Career Intentions After  
Receipt of New Billet Assignment

Change in Intent	Absolute Frequency	Relative Frequency (Percent)	
Before/After **	(Numbers) *	Of Total	Within Major Groupings
Not Retirement Eligible			
Leave - Leave	24	2.9	3.3
Leave - Continue	20	2.4	2.7
Leave - Serve	8	1.0	1.1
Leave Undecided	24	2.9	3.3
Continue - Leave	15	1.8	2.0
Continue - Continue	137	16.3	18.7
Continue - Serve	24	2.9	3.3
Continue - Undecided	23	2.7	3.1
Serve - Leave	9	1.1	1.2
Serve - Continue	18	2.1	2.5
Serve - Serve	222	26.4	30.4
Serve - Undecided	38	4.5	5.2
Undecided - Leave	12	1.4	1.6
Undecided - Continue	36	4.3	4.9
Undecided - Serve	26	3.1	3.6
Undecided - Undecided	95	11.3	13.0
Total	731	87.0	100.0

\* 86 Cases Missing

\*\* "Leave" is the shortened form for "leave service." Similarly, "continue" is for "continue active duty" and "serve" is for "serve until retirement."

Table 7B  
Change in Career Intentions  
After Receipt of New Billet Assignment

<u>Change in Intent</u>	Absolute Frequency	<u>Relative Frequency (Percent)</u>	
Before/After	(Numbers) *	Of Total	Within Major Groupings
Retirement Eligible			
Retire - Retire	5	0.6	4.6
Retire - Continue	8	1.0	7.3
Retire - Undecided	1	0.1	0.9
Continue - Retire	2	0.2	1.8
Continue - Continue	68	8.1	62.4
Continue - Undecided	10	1.2	9.2
Undecided - Retire	2	0.2	1.8
Undecided - Continue	8	1.0	7.3
Undecided - Undecided	5	0.6	4.6
Total	109	13.0	100.0

Table 8

Summary of Intention Change  
Following Receipt of the New Assignment

Intention Change	Not Retirement Eligible	Retirement Eligible	TOTAL
Negative	115	14	129
No Change	478	78	556
Positive	138	17	155
Totals	731	109	840



<u>Not Retirement Eligible</u>	<u>Retirement Eligible</u>
Serve until retirement	Continue active duty
Continue active duty	Undecided
Undecided	Retire
Leave Service	

The important generalization to be made from this simple table is that most individuals do not change their career intentions and, of those who do, the direction of change is almost equally divided among the positive and negative changes. The result in the aggregate is that the continuation rate is not seriously affected by a change in assignment, a very frequent assumption made in aggregate manpower models (Grinold & Marshall, 1977).

### Bivariate Relationships

The product-moment correlation matrix of all the continuous variables in the study is presented in Table 9. The highest correlation among the original variables in the table (.77) is between PERSONAL and INVOLVMT, and these two variables will play similar and important roles in the evaluation of the detailing process as evidenced by their frequent loading on the other study variables. SATISFY and NEWBILL are also important variables as shown by the pattern and number of variables that are highly correlated with them. While the correlation between INTCHGF and its logarithmic form, INTCHGFL, is .96, the correlations of INTCHGFL with the other variables in the study is consistently higher, suggesting a better bivariate match of their distributions with the logarithmic form. Accordingly, the logarithmic form will be used in the remainder of the study. The stand-in variable for subjective norms, SUMINF, shows disappointingly low correlations with all of the other variables and will probably not play a significant role in the multivariate analyses to follow.

The existence of only near-zero correlations between the evaluation variables (NAVY, CAREER, PERSONAL) and belief variables (TRIAD1, TRIAD2, TRIAD3) corroborates the previous discussion on the nondimensionality of the belief variables and the need to scale them nominally to be compared with other variables.

A contingency table of the BELIEF and EVAL categories is presented in Table 10. The marginal frequencies show that the combinations which gave the needs of the Navy first priority--5, 6, and 7--were overwhelmingly the most frequently ascribed to among

Table 9

Product Moment Correlation Matrix of the Study's Continuous Variables

Variable ( $X_i$ )	Variable ( $Y_i$ )													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. SATISFY	--	-07	43	58	-06	-02	08	54	-07	-05	-27	-26	-31	-56
2. NAVY		--	19	02	01	02	00	-02	02	-05	-02	04	04	-03
3. CAREER			--	53	00	-03	04	46	-08	-09	-27	-13	-18	-47
4. PERSONAL				--	04	-01	-03	77	00	-01	-18	-21	-25	-41
5. TRIAD1					--	-40	-49	02	02	-01	-05	07	07	02
6. TRIAD2						--	-14	01	03	01	-01	03	01	05
7. TRIAD3							--	01	02	04	08	-02	-04	-10
8. INVOLVMT								--	-02	-06	-18	-19	-23	-43
9. SUMINF									--	04	07	04	06	06
10. TIMELY										--	49	-04	-01	07
11. STIME											--	05	08	34
12. INTCHGF												--	96	26
13. INTCHGFL													--	32
14. NEWBILL														--

Table 10

Contingency Table of Categories of the Belief (BELIEF) and Evaluation (EVAL) Variables\*

EVAL (Y)	BELIEF (X)												Total**
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	16	10	12	7	20	14	44	1	1	13	2	5	17
2	3	5	4	3	7	5	13	2	4	9	3	1	12
3	6	1	5	3	7	8	10	0	0	1	2	1	4
4	10	8	8	7	18	15	36	3	5	11	8	5	11
5	8	3	5	2	8	14	17	4	1	4	6	3	14
6	4	5	4	1	9	7	11	2	1	5	3	3	2
7	5	4	5	3	17	16	30	2	3	13	5	5	16
8	0	1	1	0	6	0	2	0	1	3	2	0	1
9	1	1	2	0	1	2	3	1	0	1	1	0	2
10	5	1	0	2	3	6	16	1	1	0	2	0	6
11	0	0	4	1	3	6	4	1	1	1	1	0	5
12	2	3	5	1	2	5	9	3	1	1	6	1	6
13	6	5	6	0	9	2	9	1	4	2	3	1	10
(Total**) (7.3)	66 (7.3)	47 (5.2)	61 (6.8)	30 (3.3)	110 (12.2)	100 (11.1)	204 (22.6)	21 (2.3)	23 (2.6)	64 (7.1)	44 (4.9)	25 (2.8)	106 (11.8)
													901 (100.0)

\* See Table 1 for explanation of categories

\*\* The row or column total's percentage of the total cases is shown in parentheses.

the BELIEF categories. The category (13) that said that personal and career needs should be equally emphasized first, followed by the needs of the Navy was also popular. In the patterns exhibited by the evaluation (EVAL) responses, the categories with all ties (1) or two ties for first place (2-4) were the most frequent. Among those where a single triad member was found to be emphasized the most, those with the needs of the Navy in first place still retained their popularity. It should be noted that the needs of the Navy category is tied for first in the first three categories, while category 4, along with 11, 12, 13, represent the considerable number of respondents who found that personal needs were being given the highest emphasis.

The values of COMPAT are the entries on the main diagonal from 1-1 to 13-13. The sum of COMPAT--the number of times the belief pattern coincided with the evaluation of detailing pattern--is 90. That is, 1 out of 10 respondents found experience with detailing to coincide precisely with their expressed beliefs about detailing. There was considerable variability among the categories of BELIEF, however, on the probability of a compatible match. These are shown in Table 11 as conditional probabilities,  $P(Y_i|X_i)$ . Categories which had ties for first choices (1 through 4) or for the second and third choices (7 and 13) had the highest success rates. This trend suggests that respondents found what they expected. On the other hand, those who believed that career considerations had the highest priority (8, 9, 10) consistently found that career considerations were never given the highest priority. Since the satisfaction with detailing (SATISFY) seemed to be much higher than would be warranted by the 10 percent match of BELIEF and EVAL patterns, aggregated categories used for dummy coding BELIEF were also used for EVAL ( $Y_j$ ) with the conditional probabilities-- $P(Y_j|X_j)$ --shown in Table 11. This analysis says that "as long as my first choice turns up first, I'm satisfied." The conditional probabilities are considerably higher using this criterion. Finally, since there are 169 cells in the contingency table (Table 10) and 901 cases, the expected frequency per cell is 5.33, and the expected number of matches would be  $5.33 \times 13 = 69$ . The odds for finding a match would be 90/69, or 1.30 to 1.00, which is somewhat better than chance (1.0).

Tables 12A and B and Table 13 show the mean values of the detailing variables and NEWBILL by intention change category and direction of intention change, respectively. The number of cases in each category or direction of change was shown in Tables 6 and 7. The very low N in some retirement-eligible categories should be kept in mind. Generally, it appears that a low, new billet rating is the predominant trend associated with very negative changes in intent--e.g., from "serve until retirement" to "leave service" has by far the lowest NEWBILL rating of 2.778. On the other hand, positive changes appear to involve higher degrees of attention to personal desires and involvement, as well as a favorable new billet. These apparent trends require the more detailed confirmation possible in the multivariate analyses to follow.

Table 11

Conditional Probability that EVAL ( $Y_j$ ) or Aggregated EVAL ( $Y_j$ ) Matches BELIEF ( $X_i$ ), given BELIEF.\*

BELIEF ( $X_i$ )	$P(Y_i X_i)$	$P(Y_j X_i)$
1	.24	.24
2	.11	.15
3	.08	.16
4	.23	.23
5	.07	.41
6	.07	.45
7	.15	.22
8	.00	.00
9	.00	.00
10	.00	.00
11	.02	.27
12	.04	.48
13	.09	.11

\* Aggregated EVAL collapsed the  $Y_i$  categories into six cells: 1, 2-3, 4, 5-6-7, 8-9-10, and 11-12-13, where  $i=1,2,\dots,13$  categories for classifying BELIEF and EVAL as given in Table 1.



Table 12A

Mean Values of Detailing Variables and  
NEWBILL by Intention Change Category

Change of Intention Before/After*	Detailing Variables					NEWBILL
	Navy	Career	Personal	Satisfy	Involvmnt	
	Not Retirement Eligible					
Leave-Leave	2.5	3.000	3.33	3.500	3.583	6.217
Leave-Continue	2.250	2.450	2.05	2.474	2.158	7.4
Leave-Serve	2.625	2.875	2.375	2.000	2.125	7.714
Leave-Undecided	2.000	2.333	2.208	2.000	1.917	7.870
Continue-Leave	2.267	3.333	4.267	4.467	4.40	3.667
Continue-Continue	2.182	2.234	2.117	1.838	2.161	8.374
Continue-Serve	2.125	2.542	3.250	3.333	3.458	5.958
Continue-Undecided	2.130	3.130	3.565	3.478	3.783	5.609
Serve-Leave	2.000	4.444	4.333	4.333	4.444	2.778
Serve-Continue	2.722	2.444	2.444	2.111	2.389	9.056
Serve-Serve	2.243	2.495	2.518	2.230	2.688	8.070
Serve-Undecided	1.842	2.737	2.816	2.474	3.079	7.474
Undecided-Leave	2.625	2.875	3.583	2.000	2.125	7.714
Undecided-Continue	2.472	2.111	2.139	1.639	2.333	8.086
Undecided-Serve	2.731	3.115	2.462	2.308	2.760	7.250
Undecided-Undecided	2.151	2.484	2.315	2.290	2.533	7.717

\* "Leave" is the shortened form for "leave service." Similarly, "continue" is for "continue active duty" and "serve" is for "serve until retirement."

Table 12B

Mean Values of Detailing Variables and  
NEWBILL by Intention Change Category

Change of Intention  Before/After*	Detailing Variables					NEWBILL
	Navy	Career	Personal	Satisfy	Involmt	
Retirement Eligible						
Retire-Retire	1.000	4.400	4.000	3.200	3.800	5.000
Retire-Continue	1.500	3.250	1.750	1.125	2.750	8.875
Retire-Undecided	1.000	2.000	2.000	2.000	1.000	10.000
Continue-Retire	1.500	2.500	3.500	2.500	3.500	5.500
Continue-Continue	2.224	2.455	2.397	1.676	2.544	8.373
Continue-Undecided	3.200	2.700	2.500	3.100	3.100	5.800
Undecided-Retire	3.000	3.500	4.500	4.5	2.000	3.000
Undecided-Continue	2.750	2.875	2.000	1.500	1.875	8.375
Undecided-Undecided	2.800	2.200	2.400	1.400	2.800	8.250

\*"Leave" is the shortened form for "leave service." Similarly, "continue" is for "continue active duty" and "serve" is for "serve until retirement."

Table 13

Mean Values of Detailing Variables and  
NEWBILL by Direction of Intention Change

Direction of Change	Detailing Variables					NEWBILL
	Navy	Career	Personal	Satisfy	Involmt	
Negative	2.264	3.078	3.256	3.178	3.426	6.164
Positive	2.323	2.561	2.348	2.162	2.471	7.540
No Change	2.217	2.460	2.418	2.132	2.563	8.015

## Path Analysis

### Original Evaluation Variables

The multiple regression of SATISFY on the original evaluation variables--PERSONAL, NAVY, CAREER--are shown in Table 14. The first equation, using only the original evaluation variables, accounts for nearly 38 percent ( $r^2 = .375$ ) of the variance in the dependent variable, SATISFY. The obtained  $F(3,879)$  of 177.242 is highly significant. Moreover, each of the independent variables contributes significantly to the equation as indicated by their individual  $F$  values. A comparison of the coefficients indicates that attention to personal desires accounts for most of the predictability in the equation, while increasing emphasis on the needs of the NAVY decreases the overall satisfaction with detailing.

Equation 2 adds INVOLVMT to the three evaluation variables and increases the adjusted  $r^2$  by 4.5 percent from .375 to .392, while accounting for an additional 1.7 percent of the total variance of SATISFY. Examination of the coefficients reveals that the influence of PERSONAL is greatly reduced with the addition of INVOLVMT to the equation. This would be expected, of course, from the high correlation between PERSONAL and INVOLVMT of .77 that was pointed out previously. This close relationship between these two variables also accounts for the negligible increase in predictability of SATISFY when INVOLVMT was added to the equation.

The effects of adding NEWBILL to the three evaluation variables is shown in equation 3 of Table 11. It increases the adjusted  $r^2$  by 26.1 percent from .375 to .473, a gain of 9.8 percent in the amount of variance accounted for in SATISFY. These results support the evaluation model (Figure 5) which gave NEWBILL a separate path for contributing to overall satisfaction with detailing independent of the detailer-officer interaction reflected in the evaluation measures. On the other hand, an examination of the beta coefficients in equation 3 shows a considerably reduced influence of CAREER compared with its role in equation 1, suggesting that billet or assignment factors do affect the detailer-officer interaction in the area of career concerns. This finding helps to explain the moderate correlation of  $-.47$  between CAREER and NEWBILL given in Table 9.

Finally, the addition of both INVOLVMT and NEWBILL to the original variables is shown in equation 4. Not surprisingly, there is essentially no increase in the predictability of SATISFY over that given in equation 3. This would be expected from the small effect that INVOLVMT has on its own, but additionally, the two variables, INVOLVMT and NEWBILL, do not make independent contributions in equation 4 as documented by their intercorrelation of  $-.43$  in Table 9. While the  $F$  values for the individual variables are still statistically significant at the  $p = .05$

Table 14

Multiple Regression of Overall Satisfaction with  
Detailing (SATISFY) on the Detailing Variables  
and NEWBILL

Item or Variables	Equation *			
	1	2	3	4
Multiple r	.614	.628	.690	.695
Adjusted r <sup>2</sup>	.375	.392	.473	.480
DF	3/879	4/878	4/878	5/877
F	177.242	143.072	199.277	163.717
SE	1.058	1.044	.971	.965
PERSONAL	.466 .478 .031 231.542	.320 .327 .042 58.415	.387 .396 .029 180.094	.297 .304 .039 58.801
NAVY	-.132 -.122 .029 20.189	-.122 -.123 .029 17.677	-.119 -.111 .027 19.692	-.114 -.105 .207 17.995
CAREER	.204 .204 .032 40.941	.183 .183 .032 33.546	.072 .072 .031 5.394	.065 .065 .031 4.403
INVOLVMT		.190 .290 .037 25.651		.120 .133 .035 11.732
NEWBILL			-.209 -.366 .016 165.731	-.193 -.350 .016 149.499
Constant	.897	.790	2.947	2.790

\* The entry for each variable is, from top to bottom, the raw coefficient (B), the standardized coefficient (beta), the standard error of the raw coefficient, and the F with 1/df-1 degree of freedom.

level, the beta coefficients show that PERSONAL and NEWBILL are playing the primary roles in predicting SATISFY, with NEWBILL contributing the most.

#### Dummy Coded Belief Variables and the Compatibility of Belief and Evaluation

The dummy coded BELIEF categories and COMPAT, the match between the BELIEF and EVAL categories, were entered into a multiple-regression equation to predict SATISFY. The resulting equation with a multiple  $r$  of .15 and an  $F(6,858) = 3.16$  was significant at less than  $p = .005$ . However, only the dummies B4 and B5 representing career needs and personal needs, respectively, contributed significantly to the equation. Accordingly, they were simply added to equation 4 in Table 13 to assess their contribution to predicting SATISFY. (This equation will be called equation 5.) The results are shown in Table 15. The  $F$  values for the individual variables show that each member makes an independent and statistically significant contribution except for B4 ( $.05 < p < .10$ ). The standardized (beta) coefficients show that NEWBILL and PERSONAL are still the variables that account for most of the predicted variance in SATISFY. The BELIEF variables make negligible contributions to the equation. As a result, the addition of two predictors raises the multiple  $r$  to .700 over the multiple  $r$  of .695 in equation 4, but the adjusted  $r^2$  values are essentially the same (.48). Apparently the beliefs of an individual with respect to the emphasis that should be given to the members of the detailing triad have very little effect on the overall satisfaction with detailing. Only the belief that personal desires should be given highest priority (B5) has a positive and significant effect on overall satisfaction with detailing, when it is considered simultaneously with other variables in the equation. The needs of the Navy, which was given the highest priority by most respondents (Table 10) and reported to be given the greatest emphasis in dealings with the detailer, has a negative effect on satisfaction--i.e., the more it is emphasized, the less is overall satisfaction with detailing.



Table 15

Multiple Regression of SATISFY on the BELIEF  
Variables B4 and B5 Added to  
the Detailing and NEWBILL Variables in Equation 4\*

Multiple  $r = .700$  $F(7,857) = 116.900$ Adjusted  $r^2 = .484$ 

SE = .959

Variable	B	Beta	Std Error B	F
B4	0.195	0.048	0.101	3.671
B5	0.210	0.062	0.035	6.136
NAVY	-0.120	-0.110	0.027	19.506
CAREER	0.072	0.073	0.031	5.350
PERSONAL	0.290	0.296	0.391	54.730
INVOLVMT	0.110	0.122	0.035	9.711
NEWBILL	-0.195	-0.352	0.016	149.093
(CONSTANT)	2.781			

\* This will be identified as equation 5.

### Components of New Billet (NEWBILL) Ratings

While the model for analysis in Figure 5 gave the individual's performance history the greatest weight in the determination of his or her new assignment, the analysis plan called for an examination of the available billet variables as a factor in the new billet ratings in a manner similar to that just accomplished for the ratings of overall satisfaction with detailing. Accordingly, a stepwise multiple-regression analysis was conducted with NEWBILL as the dependent variable and STIME (the scaled timeliness variable) and the dummy variables representing the billet preference choices serving as the independent variables. All cases were used for this analysis--i.e., no selection was made on the basis of BILPREF, which categorized individuals by the way they had answered the billet-preference question. Only three variables entered the equation with an  $F$  value at the .05 probability level. The results are shown in Table 16. The adjusted  $r^2$ , which is subject to qualification when using a large number of variables in a stepwise manner, was .123. This was statistically highly significant with an  $F(3,785)$  of 37.96. Of the variables in the equation, STIME is the most important, which suggests that it may have been used to express satisfaction with, or acceptability of, the new billet. A rating of "present" (7) meant that the billet was acceptable. As STIME tended toward 1, the billet was more unacceptable to the point where it never would have been acceptable. The presence of a positive relationship between SRM1 (Washington most preferred for a shore billet) and NEWBILL indicated that those preferring a Washington assignment found their new billet to be more career enhancing than those in the reference group who said they were indifferent about the location of their shore tour. The comparison could also be applied to those giving a preference for the East or West coasts, who did not differ significantly from the indifferent reference group in their NEWBILL ratings. The negative relationship of BM1 (subspecialty-coded billet preferred) with NEWBILL suggests that those expressing a preference for a subspecialty-coded billet for their shore tour found their new billets to be less career enhancing than the reference group--those who expressed a preference for a general, warfare-specialist (1050) billet. This may have been due to a less-than-desirable subspecialty-coded billet or to the fact that the new billet was not subspecialty-coded.

In the findings reported above, personal preferences and Navy needs could be simultaneously met in many cases because many people preferred or least preferred the same billet category. Also, there was an apparent interaction between the emphasis on career needs and the favorability of the NEWBILL rating in predicting SATISFY. In the light of these results, NEWBILL was regressed on the original detailing variables to see to what extent the detailing negotiations might have influenced the NEWBILL rating. The results are presented in Table 17. In this instance, the adjusted  $r^2$  shows that almost 28 percent of the variance in NEWBILL ratings can

Table 16

Multiple Regression of NEWBILL on STIME  
and the Billet Preference Dummy Variables

Multiple  $r$  = .356                       $F(3,785)$  = 37.960  
Adjusted  $r^2$  = .123                      SE = 2.227

Variable	B	Beta	Std Error B	F
STIME	0.505	0.333	0.051	99.217
SRM1	0.824	0.105	0.270	9.292
BM2	-0.489	-0.083	0.205	5.711
(CONSTANT)	4.631			

Table 17

Multiple Regression of NEWBILL on  
the Original Detailing Variables

Multiple  $r = .530$

$F(4, 879) = 85.683$

Adjusted  $r^2 = .277$

SE = 2.060

Variable	B	BETA	Std Error B	F
INVOLVMT	-0.360	-0.219	0.074	23.696
PERSONAL	-0.118	-0.067	0.083	2.050
CAREER	-0.614	-0.339	0.063	96.412
NAVY	0.043	0.022	0.057	0.579
(CONSTANT)	10.352			

be predicted. The only reliable (statistically significant) predictors are CAREER and INVOLVMT, with CAREER accounting for most of the predicted variance. Thus, it can be seen that personal involvement in the detailing process and an emphasis on career needs during negotiation with the detailer, variables which played only minor roles in predicting SATISFY, are extremely important in determining the perceived, career-enhancing properties of the new billet.

### Subjective Norm Measure

The measure of subjective norms influencing intent was the simple sum of certain information sources used to determine what assignments were available (SUMINF). As the correlation matrix (Table 9) showed, it's first order relationships with the other variables was very weak, and it does not appear to be an acceptable stand-in variable for the type of variable specified in the Fishbein-Ajzen model. Since every example given in the applications section of their book (Ajzen & Fishbein, 1980) shows that the subjective norm variable contributes less than the attitude variable to the prediction of intent, it appears to be a more difficult variable to quantify and measure and/or it may be a weaker variable in influencing intent. As a check on the possibility that the wrong information sources had been included in SUMINFO, although they were logically correct from a theoretical standpoint, INTCHGFL was regressed on the information sources, which were entered as dummy variables. Only the use of the detailer (DETAIL) as an information source contributed significantly at the .05 level toward predicting INTCHGFL. The point-biserial correlation of DETAIL with INTCHGFL was .105 with  $r^2 = .011$ . Its use in SUMINFO with the other variables diluted its effect, which was not great.

### Prediction of Career-Intent Change

The first attempt to predict career-intent change simply regressed INTCHGFL on SATISFY and SUMINF with SATISFY representing the composite attitude measure and SUMINF representing the subjective norm measure in the Fishbein-Ajzen model. The resulting adjusted  $r^2$  was .114 with  $F(2,702) = 46.166$ . While the equation was highly significant, the only significant predictor was SATISFY. The addition of SUMINFO resulted in a prediction that was no better than the use of SATISFY, alone, which had an  $r^2$  of .115 for predicting INTCHGFL in this subsample.

Since Equation 5 predicted almost half of the variance in SATISFY, its substitution for SATISFY in the prediction of INTCHGFL should provide insight into the components of overall satisfaction with detailing that are most closely related to the intent measure.



This regression of INTCHGFL on the predictor variables of Equation 5 is shown in Table 18. (The reader is reminded that increasing value of INTCHGFL are associated with greater retention intent.) The adjusted  $r^2$  of .114 compares favorably with the amount predicted when SATISFY, itself, was used and provides a basis for confidence in identifying the components of SATISFY that are important in predicting the retention variable. An examination of the predictors shows that only PERSONAL and NEWBILL make reliable and significant contributions toward predicting INTCHGFL, with NEWBILL playing the most important role by far. It was shown in Table 17 that the detailing variables, CAREER and INVOLVMT, exert their influence through NEWBILL.

#### Stepwise Multiple Regression of INTCHGFL on All of the Study Variables

In order to provide a check or control against the path-analytic approach to the prediction of career-intent change--a measure of retention intent--the analysis plan called for an atheoretic, strictly empirical prediction of INTCHGFL using all of the study variables in a forward, stepwise, multiple regression. The subsample for this analysis was determined, primarily, by selecting only the 567 cases that had answered the billet-preference question in the intended manner. In the analysis of NEWBILL components, all cases were used to make the subsample comparable to those used for the analysis of SATISFY. The procedure was especially necessary in the application of Equation 5 predictors for the prediction of INTCHGFL instead of SATISFY. In the present case, the dependent variable is INTCHGFL and the subsample should be the largest common denominator that represents only the most valid cases for all of the variables. Only SUMINF was used to represent the information source used, and SATISFY was not used.

The resulting equation is shown in Table 19. No other variable entered the equation at this point of the stepwise procedure with an  $F$  significant at the .05 level of probability. Again, as in the case using Equation 5 predictors, PERSONAL and NEWBILL enter the equation, but here PERSONAL plays the greater role. NAVY enters the equation with a negative effect--the less emphasis there is on needs of the Navy during the assignment process, the more favorable is the value of INTCHGFL. In general, this portion of the analysis confirms the appropriateness of the path-analytic model presented in Figure 5 inasmuch as the predicted variance of INTCHGFL was greater in Equation 5 and the predictors, themselves, closely agree.

Table 13

Multiple Regression of Intention  
Change (INTCHGFL) on Satisfaction  
Predictors (Equation 5)

Multiple  $r = .349$        $F(7,795) = 15.765$   
Adjusted  $r^2 = .114$        $SE = .145$

Variable	B	BETA	Std Error B	F
B4	-.009	-0.020	0.016	0.340
B5	-.015	-0.038	0.013	1.284
NAVY	.004	0.031	0.004	0.816
CAREER	.002	0.020	0.005	0.221
PERSONAL	-.014	-0.123	0.006	5.342
NEWBILL	.016	0.257	0.002	43.545
INVOLVMT	-.004	-0.040	0.005	0.588
(CONSTANT)	.662			

Table 19

Stepwise Multiple Regression of Intention  
Change (INTCHGFL) on All Study Variables

Multiple  $r = .316$        $F(3,421) = 15.590$   
Adjusted  $r^2 = .094$        $SE = .135$

Variable	B	BETA	Std Error B	F
PERSONAL	-.022	-0.208	0.005	16.668
NEWBILL	.009	0.143	0.003	7.911
NAVY	.011	0.094	0.006	4.084
(CONSTANT)	.726			

## DISCUSSION

Most of the respondents were very satisfied or satisfied with detailing as they experienced it, placed their new billets at or near the top of the ladder rankings, and expected to continue on active duty. Still, there was a sizeable group of approximately one-third of the respondents that was neutral to negative in these same dimensions and changed their active duty intent. Thus, there seems to be considerable room for improvement of the detailing process from the standpoint of the person who is being reassigned. This study did not have the data to determine to what extent the quality of the officer was related to these perceptions of the detailing process and the new billets. But since satisfaction with detailing and the new billet were related to retention intention, there should be concern about the possible differential effects of detailing on the basis of officer quality. In a similar study of junior line officers, Holzbach, Morrison, and Mohr, (1980), however, did not find a significant relationship between officer quality and evaluation of the assignment process.

In expressing their beliefs about the priority of emphasis that should be given to the triad of detailing, most of the respondents described patterns or profiles that placed the needs of the Navy in first place. There was a distinct, although considerably smaller, group, that maintained that personal desires and career considerations should be given first priority. There was very little correspondence between an individual's profile of beliefs about detailing and a profile that was constructed as a result of the person's evaluation of the emphasis given to the triad members during actual negotiations in the detailing process. This was especially true for the group that had placed personal desires and career needs in first priority. There was greater correspondence between just the first priority belief and the highest emphasis experienced in actual detailing. There was a very small relationship between what respondents said ought to be emphasized and satisfaction with detailing. Though most had given the needs of the Navy first position in what should be emphasized, emphasis on the needs of the Navy in the actual detailing process always had a negative influence on satisfaction with detailing or retention intent. Those who said that personal and career needs should be given priority tended to find greater satisfaction with detailing and their new assignments. It appears that those who espoused the traditional, company policy in their beliefs did not like it when it was fed back to them. On the other hand, those who went into negotiations in the detailing process with an expectation that personal desires and career needs were the primary basis for negotiations and decisions were most likely to emerge from the encounter satisfied.

Factors involved in the detailing process that most influenced the overall satisfaction with detailing were an emphasis on personal needs and the new assignment, itself. Acceptability of the new billet was determined most by the individual's perceived involvement in the detailing process and the emphasis given on career needs. Timeliness of the new billet from an overall career perspective and the desire for a Washington-based shore billet were also positive contributors to satisfaction with the new billet. But those whose preference was for a subspecialty-coded shore billet were less satisfied with their new assignment than officers who preferred a general, warfare specialist (1050) billet.

Satisfaction with detailing, whether defined by a simple overall measure of satisfaction or an equation predicting satisfaction with detailing, explained about 11 percent of the variance in career intent (retention) as a result of the detailing process. This compares with only 4 percent of the variance explained in a similar study by Holzbach, Morrison, and Mohr, (1980) using only junior, line officers. It is difficult to predict career intent change when it does not change for most officer's in midcareer. But if there is concern about retaining officers, the knowledge that the detailing process does have an effect on retention intent is important because it provides the opportunity to do something about improving retention. The aspects of the detailing process that affected retention intent were attention given to personal desires in the detailing process and the new billet, itself. Emphasis on the needs of the Navy had a negative effect. The billet preferences expressed by the respondents revealed that as many most-preferred or least-preferred the same category of billet in many cases. If this is so, there seems to be a good opportunity to find billets that are both personally desired and meet the career needs of the individual being reassigned. The needs of the Navy will take care of itself in this situation and does not require emphasis in negotiations.

Only half of the variance in overall satisfaction with detailing could be predicted from the emphasis given the detailing triad, involvement in the detailing process, and the new assignment. Obviously there are many other factors involved in detailing that were not addressed in this study. Some of these come under the broad classification of administrative procedures, such as the timeliness of informal and formal notifications of the assignment decision, timeliness in the receipt of orders, availability of communication channels to the detailing system, and the availability of the detailer, herself or himself. There seems to be a common perception that information about the actual billets available are withheld from the individual being reassigned, which gives the detailer an unfair advantage. There are also the interpersonal skills of the detailer and aspects of the new billet that impact on family quality of life. These and other similar factors



are brought out in the open-ended responses (Arima, 1981a) and classified in the content analysis by Nye (1981). Holzman, Morrison, and Mohr (1980) found such variables to be significantly related to the evaluation of the detailing process in their junior officer sample. Future studies of the detailing process should include an evaluation of these important, "bread and butter" issues.

These findings suggest that a greater sensitivity to personal and career needs and improved transactional skills on the part of the detailer that would result in a greater feeling of involvement on the part of the person being reassigned could improve the acceptance of management's role in the detailing process. From the standpoint of the individual being reassigned, it is apparent that too many persons may have an overly naive and fragile concept of what a career involves. Unquestioned acceptance of organizational doctrine as the sole guideline for career decisions does not permit the satisfactory resolution for an individual of career and personal needs with the requirements of the organization for the adequate manning of positions. Greater emphasis should be given in service schools or special workshops to help officers develop more mature and realistic career objectives and strategies by utilizing the large amount of information there now is on careers. A workshop on officer career management given as an elective at NPS and developed as a direct by-product of this research project received such accolades as "the best course I've taken" and "every student should have this course." The point to be made is that even selected officers, such as NPS students, find it a genuine eye-opening experience when they realistically attempt to appraise and establish their career objectives and options and the long-run strategies and tactics for meeting them. Actions, such as those recommended, should result in a greater commitment by officers and their families to a military career, make detailing a more difficult but rewarding experience to both the detailer and the consumer, and ensure the most effective utilization of available talent--especially in the case of the very well-qualified individuals.

The model of the process that leads from the performance history of the individual, to the formation of beliefs about detailing, to the evaluation of detailing experienced, to the formation of a career intention, and the role of the new assignment in the process proved to be useful in eliciting an understanding of the relationships among the important variables involved in the detailing process. Without a theoretical approach, there are too many variables to achieve an understanding of the underlying dynamics (Young, 1977). Too often, survey results are examined by myriads of cross tabulations with much conjecture about their interrelationships. In other attempts, such as the study by



Holzbach, Morrison, and Mohr (1980), factor analysis or other grouping techniques are used to reduce the number of variables. This approach helps to understand the commonalities in the data, but in many instances, considerable conjecture is required to identify and name the factors. Relationships among them are not revealed by the analysis but must be constructed and their consequence verified empirically.

This research made use of the job satisfaction literature and the attitude measurement literature for predicting social behavior. The satisfaction measures were not of job satisfaction but satisfaction with a very limited segment of the job of a military line officer. The attitude measures referred to an individual's orientation toward managerial practices in this limited segment of the job and were not measures of attitude toward a specific behavioral action as required by the attitude-behavior model. Nonetheless, a variable representing retention intent in the aggregate was better predicted by using only six variables that had been identified by a path analysis generated by theoretical considerations than a stepwise multiple regression using a shopping list of five times as many variables. The results were consistent with the job satisfaction literature and that portion of the Ajzen-Fishbein (1977) concepts that state that general measures of attitude toward the job and a general measure made up of the diverse behaviors of many individuals--such as job tenure--are strongly correlated, since both are general on the action dimension. That is, no specific behavioral act is being predicted. The approach used in this study to develop and identify relationships within the model and the results of the effort are consistent with the methods and results found by Hom and Hulin (1981) in testing several models predicting enlisted reenlistment.

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